DOCUMENT RESUME

ED 482 975 EA 032 074

AUTHOR	Reichardt, Robert
TITLE	Laying the Groundwork: Information on Wyoming Superintendent and Principal Qualifications, Supply, and Demand.
INSTITUTION	Mid-Continent Research for Education and Learning, Aurora, CO.
SPONS AGENCY	Wyoming State Dept. of Education, Cheyenne.
PUB DATE	2002-01-17
NOTE	89p.
AVAILABLE FROM	Mid-Continent Research for Education and Learning, 2550 S. Parker road, Suite 500, Aurora, CO 80014. Tel: 303-337-0990; Fax: 303-337-3005; Web site: http://www.mcrel.org.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Research (143)
EDRS PRICE	EDRS Price MF01/PC04 Plus Postage.
DESCRIPTORS	Administrators; Instructional Leadership; *Principals; School Administration; *Superintendents
IDENTIFIERS	Wyoming

ABSTRACT

This report begins with background information on the demographic changes affecting Wyoming public education. Following that, there is a short section on the methodology used for this report. The next section provides a general description of the principal and superintendent workforces, which is followed by a short section on leader certification. It then discusses principal and superintendent demand and supply issues. The report concludes with a short summary and discussion. (Author/AMT)

Laying the Groundwork:

Information on Wyoming Superintendent and Principal Qualifications, Supply, and Demand

prepared for
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January 17, 2002

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EXECUTIVE SUMMARY

Education policymakers across the state of Wyoming are pausing at the threshold of the 21st century to take stock of school and district leadership and plan to meet future leadership challenges. This report, by Mid-continent Research for Education and Learning (McREL), provides background information for policymakers in developing common understandings of demand, supply, and qualification issues in the Wyoming education leadership workforce. Sponsored by a contract with the Wyoming Department of Education (WDE), this report and analysis are intended to support planning and implementation efforts to meet the challenge of education reform and the issues described in this report.

The report begins with background information on the demographic changes affecting Wyoming public education; this section is followed by a short section on the methodology used for this report. The next section provides a general description of the principal and superintendent workforces, which is followed by a short section on leader certification. The next sections focus on, first, principal and, then, superintendent demand and supply issues. Information on demand issues revolves around attrition and transfers. Information on supply issues focuses on the sources of Wyoming's education leaders, that is, the jobs these leaders held before they became principals or superintendents. The report concludes with a short summary and discussion.

DEMOGRAPHIC TRENDS FACING WYOMING EDUCATION

Enrollment in Wyoming public schools has steadily declined over the past eight years and is expected to continue to decline for the next 10 years. Figure 1 shows enrollment trends by region within the state from 1993 through 2000. The regions used here are county based and were taken from the Wyoming Department of Employment, which uses these regions to report labor force data for the state (see http://lmi.state.wy.us/). A table showing the relationship between districts, regions, and locale is located in Appendix A.

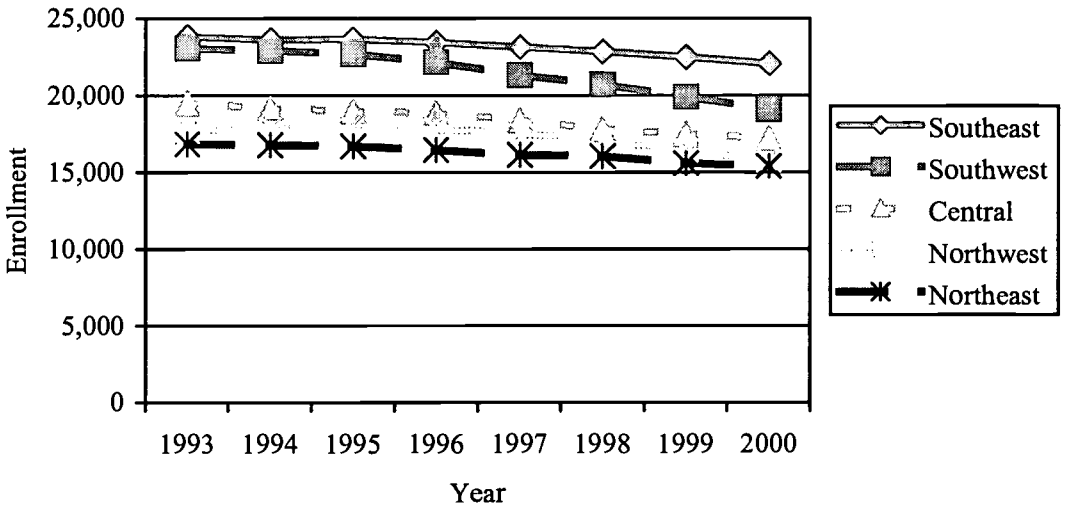


Figure 1: Wyoming Enrollment Trends by Region

Source: WDE Student Enrollment Data

Total enrollment in 1993 was about 100,000, which declined to about 90,000 by 2000. The fastest decline occurred in the southwest region of the state, where enrollment decreased by 17 percent. The proportion of students in each region remained steady. In 2000, about a quarter of all students lived in the southeast, and about 17 percent lived in the northeast.

The Wyoming Department of Administration forecasts that these declines will continue through 2008. Figure 2 shows projected school-age population for Wyoming by region from 2000 through 2008.

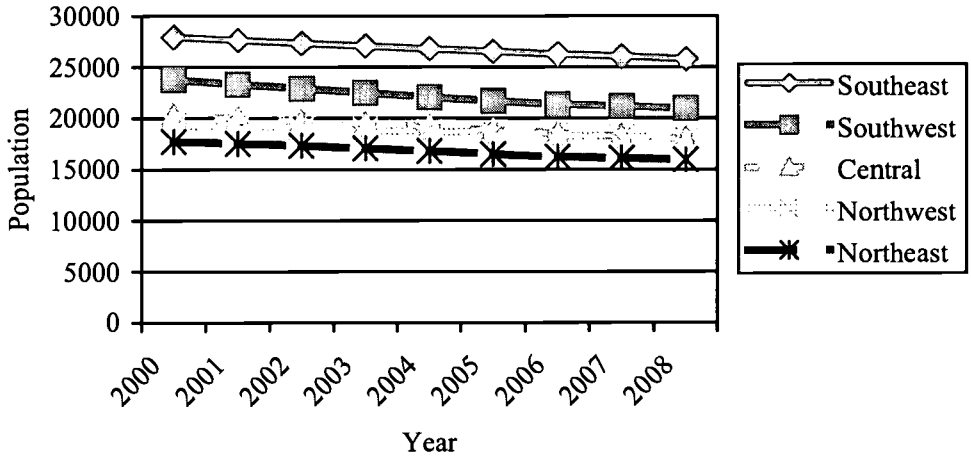


Figure 2: School-Age Population Projection

Source: Wyoming Department of Administration: http://eadiv.state.wy.us/pop/pop.htm

The Wyoming school-age population is forecasted to decline by 10 percent between 2000 and 2008; relatively equal declines are forecasted in all regions of the state.

Information on population and enrollment changes by locale is contained in Appendix B. These data show that the majority of Wyoming's school-age population lives in small towns, followed by large towns/cities and then rural. All locales have experienced enrollment declines; these declines are forecasted to continue through 2008 at relatively similar rates for all locales. The largest declines have occurred and are expected to continue in small towns.

Unlike enrollment, the number of teachers and schools has increased. Between 1993 and 2000 the number of teachers increased by about five percent, from 6,890 to 7,217. The number of schools remained fairly constant at about 390.

ANALYSIS METHODOLOGY

This report uses data provided by the Wyoming Department of Education (WDE). The data on education professionals are drawn from the Professional Staff List Report completed by districts each fall. The enrollment data include membership, ethnicity, and participation in free and reduced lunch at the school level, which was summed to the district level to create district enrollment information.

The central limitation of this report is the quality of the data provided by districts in the Professional Staff List Report to the WDE. Districts provided the data by completing a questionnaire. Before releasing the data, WDE ensured that the data fields were complete. The main source of data quality issues is new questions on the questionnaire. In order to

allow for a period of familiarization with new questions, data from the first year of a new question, such as experience, are not reported.

The Professional Staff List Report contains information on the work assignments of all education professionals working in the state. Education professionals can have multiple assignments. For this report, individuals were counted as superintendents, principals, and assistant principals if they reported assignments to these jobs in any of their first 10 reported assignments.

A slightly different method was used for job designation for assignments prior to leadership roles. Individuals were assigned to one of 18 job categories based on where they spent the majority of their time. A table showing the relationship between WDE job categories and the job categories used in this report is located in Appendix C. One of the 18 job categories is the rather broad category of administration; further detail on activities by people placed in this category was derived from their first assignment.

There is some imprecision in these definitions. First, an individual may be designated as both a principal and a superintendent if he or she reported working in both jobs. Between 1993 and 2000 there were 18 instances of people serving as both principals and superintendents. There were eight instances of people working as both principals and assistant principals.

Finally, the WDE data include the individual school to which each principal is assigned, along with information about the location and size of the school. There are many schools in Wyoming that are not assigned a principal, since there are roughly 390 schools in Wyoming but only about 265 principals per year. It is most likely that these schools share principals or have some other type of supervisor. Schools that are not assigned principals are generally smaller schools. Table 1 shows the distribution of principals by school size quartile in 2000. In this particular year, there were 93 schools in each enrollment quartile. All schools in the largest quartile had principals (93), compared to only 15 percent (14) of the smallest schools.

Table 1: School Size and Number of Principals in 2000

	Number of Schools	Principal Count
School Quartile 1: Smallest	93	14
School Quartile 2	93	62
School Quartile 3	93	79
School Quartile 4: Largest	93	93

Source: WDE Professional Staff List Report & WDE Enrollment Data

DESCRIPTION OF WYOMING EDUCATION LEADERS

This section provides demographic information about education leaders working in Wyoming, beginning with principals.

WYOMING PRINCIPALS

Table 2 shows the number, average age, average salary, and proportion of female principals working in Wyoming.

Table 2: Demographics of Wyoming Principals, 1993 through 2000

Year	Number	Average Age	Average Salary	% Female
1993	264	46.4	$ 49,341	16%
1994	269	46.5	$ 50,014	17%
1995	271	46.9	$ 50,735	20%
1996	263	47.4	$ 51,138	21%
1997	266	47.2	$ 52,274	21%
1998	271	47.5	$ 54,822	22%
1999	262	47.8	$ 56,124	26%
2000	260	48.1	$ 57,437	31%

Source: WDE Professional Staff List Report

There were no clear trends from 1993 through 2000 in the number of principals, which fluctuated between 260 and 271. The average age of principals slowly and steadily increased from 46.4 to 48.1. As a comparison point, in 1993 the median age of secondary principals in Nebraska was between 41 and 45 and the median age of elementary principals was between 46 and 50 (Wendel et al., 1994). The increase in the age of principals from 46.4 to 48.1 was slightly less than the increase in the average age of teachers in the state, which moved from 41.6 to 43.6 over the same period (Reichardt, 2002). The average salary also increased during this period. Increases between 1993 and 1995 were relatively small, between .8 percent and 1.4 percent. The rate of increase was higher from 1996 to 1999, from 2.3 to 4.9 percent. The largest increase occurred between 1997 and 1998. The proportion of female principals essentially doubled from 16 to 31 percent.

To look at principal leadership by grade level, principals were assigned to grade groupings based on the grade level of the students they reported serving. Four non-exclusive grade groupings were created:

1. Elementary: kindergarten through sixth grades
2. Middle/junior high: sixth through ninth grades
3. High school: ninth through twelfth grades
4. All grades: kindergarten through twelfth grades

The proportion of principals working at each grade level remained fairly steady. About 50 percent worked in elementary schools; 24 percent, in high schools; 18 percent, in middle/junior high; and between five and 10 percent, in "all grades" schools. For further details see Appendix D.

Figure 3 shows the proportion of female principals by grade level. Between 1993 and 2000, high schools had the smallest proportion of females, between nine and 16 percent. The proportion of females at the other grade levels ranged from 17 to 39 percent. A general increase was observed at each of the grade levels in the proportion of female principals, with the largest increase, nearly 240 percent, in elementary principals. The smallest proportional increase from 1993 to 2000, about 150 percent, was observed for middle/junior high and all grades principals. The proportion of female principals working in all grades schools generally increased but was not very stable due to the small and often changing number of principals in this group.

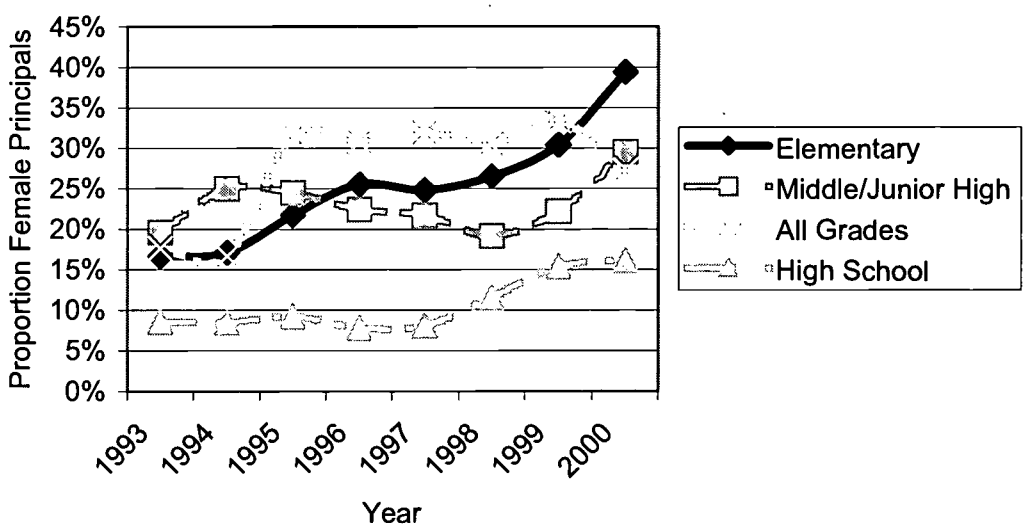


Figure 3: Female Principals by Grade Level

Source: WDE Professional Staff List Report

Table 3 shows the demographics of principals in 2000 by region within the state. In 2000, there were fairly equal numbers of principals in each region. The southeast had the most principals (57); the northeast had the fewest (44). Principals were slightly older in the southeast and younger in the northeast. Average salaries were highest in the central region of the state and lowest in the northwest.

Table 3: Wyoming Principals in 2000 by Region

	Number	Average Age	Average Salary	Percent Female
Northwest	52	48	$54,575	29%
Northeast	44	46	$56,329	25%
Southwest	56	48	$57,155	23%
Southeast	57	50	$58,853	37%
Central	51	48	$60,038	41%

Source: WDE Professional Staff List Report

There is a larger variation in the proportion of females working as principals in the regions. Based on 2000 data, the central and southeast regions have relatively higher proportions of female principals, 41 and 37 percent, respectively. The southwest and northeast have relatively fewer female principals, 23 and 25 percent, respectively.

Another way to look at principal demographics is by school size, that is, enrollment served by the schools where the principal works. The same enrollment quartiles shown in Table 1 are used in Table 4. Instead of averages, medians are used because of the relatively small number of principals in the smallest schools, which makes averages less stable measures of characteristics[1].

Table 4: Wyoming Principals in 2000 by School Size

	Median Age	Median Salary	Percent Female	Principal Count
School Quartile 1: Smallest	49	$51,962	29%	14
School Quartile 2	48	$53,828	23%	62
School Quartile 3	49	$56,052	39%	79
School Quartile 4: Largest	48	$60,852	29%	93

Source: WDE Professional Staff List Report

The only clear pattern, when looking at principals by school size, is that principals in larger schools generally have higher salaries. There is no clear relationship between school size and principal age or proportion of female principals.

Examining principal characteristics by school locale is useful. Information on locale used for this report was compiled from the U.S. Census Bureau through WDE. As Manley (2000) points out, these local definitions do not always match the expectations of people in the field. Table 5 shows information on principals by locale in 2000. As Table 5 shows, based on 2000 data most Wyoming principals work in small towns. Those who work in cities or large towns generally receive higher salaries. As noted earlier, higher

[1] The median is the midpoint of a group of numbers. Half the values are above the median, and half are below.

salaries are also associated with larger schools, which make up a majority of the schools in cities and large towns.

Table 5: Wyoming Principals in 2000 by Locale

	Number	Age	Salary
City/Large Town	69	50	$ 61,351
Small Town	103	47	$ 57,949
Rural	88	48	$ 53,770

Source: WDE Professional Staff List Report

Figure 4 shows changes in the proportion of female principals by locale. Cities and large towns have seen the largest growth in female principals; between 1993 and 2000, there was a four-fold increase, from 11 to 43 percent. The proportion of female principals in small towns doubled over the same period from 16 to 32 percent. At the same time, growth in the number of female principals in rural schools was relatively small, increasing from 17 to 20 percent.

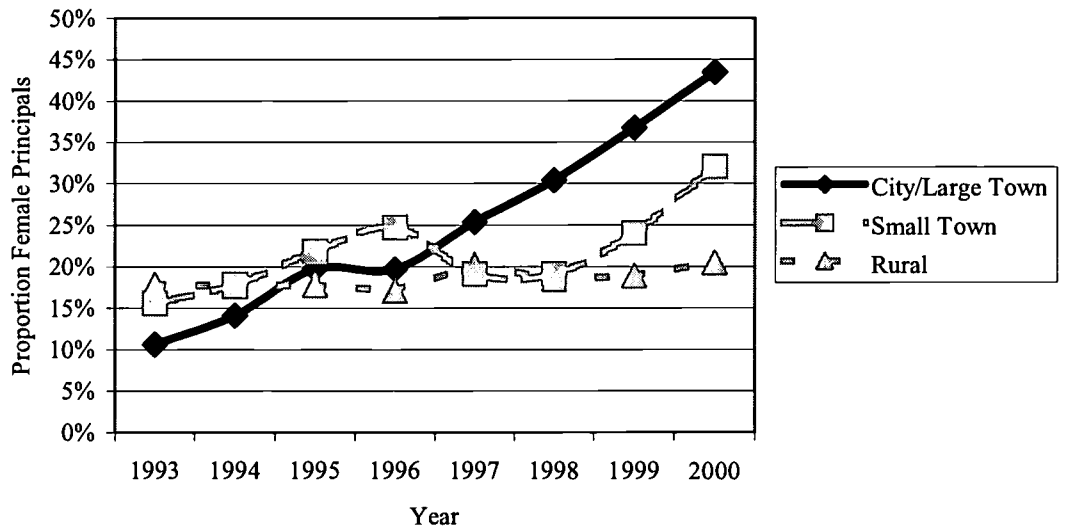


Figure 4: Female Principals by Locale

Source: WDE Professional Staff List Report

WYOMING SUPERINTENDENTS

Table 6 provides demographic information on superintendents. Because the number of superintendents is relatively small, all of the summary data presented here are medians instead of averages.

Table 6: Demographics of Wyoming Superintendents, 1993 through 2000

Year	Number	Median Age	Median Salary	% Female
1993	49	52	$63,000	0%
1994	49	54	$63,000	2%
1995	49	53	$64,200	6%
1996	50	51	$63,518	4%
1997	48	52	$65,786	2%
1998	48	53	$68,577	4%
1999	50	53	$70,650	4%
2000	48	53	$72,250	8%

Source: WDE Professional Staff List Report

The number of superintendents has been relatively stable, between 48 and 50, reflecting little district consolidation activity during this period. The median age also has been relatively stable, remaining at 53 for the last three years. As has been observed about principals, superintendents' salaries generally increased between 1993 and 2000; the largest increase occurred between 1997 and 1998. Superintendents' salaries were essentially flat between 1993 and 1996; larger increases occurred in subsequent years. The proportion of females grew, from zero in 1993 to eight percent in 2000.

Table 7 shows demographic information about superintendents in 2000 by region (the same regions used for principals). The northwestern part of the state, where the majority of the female superintendents work, has the most superintendents (18) and the lowest median salary ($69,308). The southwestern region ranks second in terms of the number of superintendents (10). The central region is interesting in that the few superintendents who work there (5) are generally younger, with a median age of 43. The median ages in the other regions are between 54 and 56. Historically the median age in the central region has been lower than other regions, but not to this degree (see Appendix E). The southeast has the highest median salary, $81,666.

Table 7: Wyoming Superintendents in 2000 by Region

	Number	Median Age	Median Salary	Percent Female
Northwest	18	54	$ 69,308	17%
Northeast	8	56	$ 74,206	0%
Southwest	10	54	$ 74,022	10%
Southeast	7	54	$ 81,666	0%
Central	5	43	$ 74,188	0%

Source: WDE Professional Staff List Report

Districts were grouped into quartiles by enrollment, as were schools, as a way to glean further insights into their characteristics. Each quartile includes 12 districts. Table 8 shows demographic information on superintendents by district enrollment. No clear

relationship between age and district enrollment is evident. Superintendents in larger districts receive higher salaries; the median salary in the largest 12 districts is about $20,000 higher than salaries in the smallest 12 districts. Female superintendents are concentrated in smaller districts.

Table 8: Wyoming Superintendents in 2000 by District Enrollment

	Median Enrollment	Median Age	Median Salary	Percent Female
District Quartile 1: Smallest	273	57	$65,500	17%
District Quartile 2	744	49	$69,808	17%
District Quartile 3	1,413	54	$74,206	0%
District Quartile 4: Largest	3,233	55	$84,750	0%

Source: WDE Professional Staff List Report & WDE Enrollment Data

Table 9: Wyoming Superintendents in 2000 by Locale

	Number	Age	Salary	Percent Female
City/Large Town	3			
Small Town	18	54	$79,350	0
Rural	27	53	$68,483	15%

Source: WDE Professional Staff List Report

Districts can also be classified by locale, as seen in Table 9. Only three districts fall into the category of city or large town, and the demographic information on these superintendents has not been shown to protect their privacy. Patterns observed about locale are very similar to those related to district size. Salaries do increase as districts become more urban. There is not an observable pattern between superintendents' ages and locale. All of Wyoming's female superintendents work in rural districts.

LEADER CERTIFICATION

Data provided by the Professional Teaching Standards Board (PTSB) include information on leader certification. These data cannot be disaggregated by locale or region. The PTSB provided data from 1996 to 2000 on the number of not fully certified educators by subject, including principals and superintendents. If one assumes that districts prefer fully certified leaders, then an increase in not fully certified leaders can indicate a shortage in supply.

The link between this indicator and education professional quality has not been clearly established by the limited research that is available. In fact, the link between certification and teacher quality is highly debated (Goldhaber & Brewer, 2001; Darling-Hammond, Berry, & Thoreson, 2001).

Table 10 shows data on not fully certified principals and superintendents. Not fully certified educators are defined as having a transitional, exception, or intern permit[2]. Between 1996 and 2000, the proportion of not fully certified superintendents moved between two and six percent; no trend was observed.

Table 10: Number of Not Fully Certified Wyoming Education Leaders, 1996 through 2000

	Principals		Superintendents	
	Number	Percent	Number	Percent
1996	6	2%	2	4%
1997	9	3%	3	6%
1998	8	3%	2	4%
1999	6	2%	1	2%
2000	50	19%	3	6%

Source: Wyoming PTSB & WDE Professional Staff List Report

The proportion of not fully certified principals remained between two and three percent between 1996 and 1999, but jumped to 19 percent in 2000. This jump was most likely due to a doubling of the number of principals with transitional certification (from six to 13) and creation of the leadership intern program, which had 35 principal participants. The increase in interns is the product of a policy change (the creation of a new program) and is not a reliable indicator of qualification or supply issues. The increase in the number of principals with transitional certificates suggests that principal supply may be an issue that should be investigated further, but in and of itself does not indicate a supply issue.

PRINCIPAL DEMAND ISSUES

This section provides some basic information on principal demand. It begins with information about attrition from the state principal workforce and is followed by an analysis of transfers. Attrition in this case is defined as principals who do not work as principals in the state the next year. Those who move to other positions, such as superintendent, are counted as attrition from the principal workforce. The next demand issue is principal transfers, that is, principals who move from one district to another.

PRINCIPAL ATTRITION

Principal attrition is related to principals' age. Figure 5 shows the proportion of principals who left by age category from 1993 to 1999.

[2] For more information on types of certification, see the Administrators Handbook at http://www.k12.wy.us/ptsb/index.html#rules.

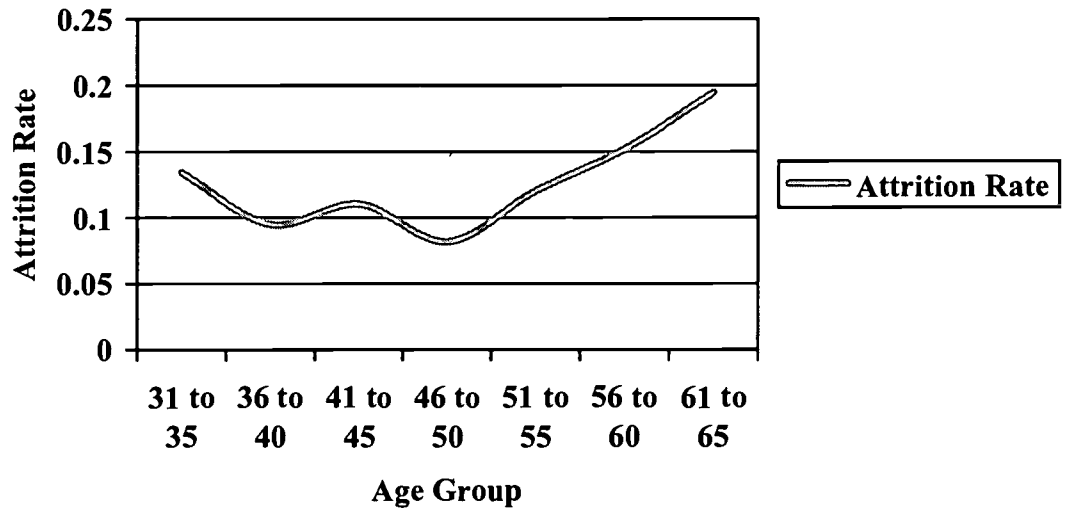


Figure 5: Average 1993 to 1999 Principal Attrition Rate by Age

Source: WDE Professional Staff List Report

During this time, younger principals had a slightly higher attrition rate, which leveled off during middle age. The rate then increased as more principals moved closer to retirement age. As Table 2 shows, the average age of Wyoming principals is increasing slowly, suggesting that there may be increased attrition if this trend continues.

Table 11 shows principal attrition rates by year and the proportion of the workforce that will be eligible to retire within five years. Retirement eligibility was calculated assuming principals can retire when they reach 60 or when the sum of their age and state experience equals 85. There is no retirement eligibility information for the years before 1997 due to a lack of experience data.

The attrition rate generally increased from between six and 10 percent in 1993 and 1994 to between 13 and 16 percent in 1998 and 1999. Equally important, the proportion of principals eligible to retire within five years has steadily increased to the point where a quarter of all principals can retire within five years of 2000. This suggests that Wyoming will face increasing demand for principals over the next few years as a large number of principals become eligible for retirement.

Table 11: Principal Attrition Rate and Eligibility to Retire by Year, 1993 through 2000

	Attrition Rate	Eligible to Retire within Five Years or Less
1993	6%	
1994	10%	
1995	10%	
1996	8%	
1997	12%	15%
1998	13%	18%
1999	16%	21%
2000		24%

Source: WDE Professional Staff List Report

In order to look at issues of attrition and retirement by school characteristics, the average attrition rate and proportion of principals eligible for retirement in five years or less were calculated for 1997 to 2000. Table 12 provides this information by school enrollment quartiles. Clearly, smaller schools have much higher attrition rates; almost double those of the largest schools. Smaller schools also have more principals eligible to retire within 5 years, which is clearly a factor in the higher attrition rates. These data indicate that demand is higher for principals in the smaller schools and that demand may increase due to higher retirement rates.

Table 12: Average 1997 to 2000 Principal Attrition and Eligibility to Retire by School Enrollment

	Attrition Rate	Able to Retire within Five Years or Less
Quartile 1: Smallest	25%	37%
Quartile 2	18%	14%
Quartile 3	11%	17%
Quartile 4: Largest	12%	22%
Total	14%	19%

Source: WDE Professional Staff List Report & WDE Enrollment Data

Larger schools may soon face higher retirement rates. Although recent attrition rates in these schools are low, they may soon increase faster than the middle two quartiles because of the higher proportion of retirement-eligible principals. Similar information on attrition and retirement eligibility by locale and region is contained in Appendix D.

PRINCIPAL TRANSFERS

The transfer of a leader out of one district to another district is a "quit" as far as the district that lost the leader is concerned. Thus, transfers can be considered a form of attrition. An examination of transfers may identify areas that have higher demand since

more leaders transfer from those districts. Conversely, districts that receive many transfers may have fewer supply issues than other districts due to their ability to use other districts as a source of supply.

Two types of transfers will be examined. The first type is the transfer of people who move to take their first job as a principal. This action means a loss of a potential leader in one district and the gain of a leader in another district. Within the data set there are 256 first-year principals. For 192 of these principals, there are data on the jobs they held before they became principals. About a third of the 192 principals with prior job data changed districts to take their new positions. These transfers will be called *new principal transfers*. The other type of transfer is of existing principals. Existing principal transfers are defined as the movement from one district to another of people who are already principals. Between 1994 and 2000 there were 41 principals who transferred districts.

The method for examining transfer patterns is to look at the net loss or gain of leaders between 1994 and 2000. An area that receives more leaders than it loses due to transfers has a net gain, which is shown as a positive number. An area that loses more leaders than it receives due to transfers has a net loss, which is shown as a negative number. Table 13 shows the net gain and loss of principals by locale.

Table 13: Net Gain or Loss of Principals Due to Transfers by Locale between 1994 & 2000

	City/ Large Town	Small Town	Rural
First-Year Principals	-2	-15	17
Existing Principals	5	5	-10

Source: WDE Professional Staff List Report

The row labeled "First-Year Principals" shows the net flow of people who changed districts to become principals between 1994 and 2000. Schools in cities or large towns had a net loss of two, and small towns had a net loss of 15, while rural schools gained 17 first-year principals from cities or towns. The flow of existing principals was in the opposite direction, out of rural schools to schools in cities in towns. Taken together, these data show that people move to rural areas to become principals and then principals move out of rural areas as they gain experience. As far as supply and demand are concerned, data about principal transfers between locales show that transfers increased supply pressures on small towns since these towns lost 10 more first-year principals than they gained from transfers of experienced principals.

Table 14 shows similar data by school enrollment category. These data are not surprising given the data shown above. Between 1994 and 2000, first-year principals transferred out of the largest schools to smaller schools. Remember that Table 1 shows that there are very few principals in the smallest quartile. Although the smallest schools receive fewer first-year principals than quartile 2 or 3 schools, this net transfer represents a larger proportion of the total number of first-year principals in the smallest schools.

Table 14: Net Gain or Loss of Principals Due to Transfers by Enrollment Category between 1994 & 2000

	Quartile 4: Largest	Quartile 3	Quartile 2	Quartile 1: Smallest
First-Year Principals	-18	7	8	3
Existing Principals	3	4	-3	-4

Source: WDE Professional Staff List Report & Enrollment Data

Although the smallest schools gain first-year principals, they lose experienced principals. On balance, the largest schools still lose more principals than they gain.

Table 15 shows similar data for transfers between regions. Here we see a general flow of principals out of the northeast and southwest into the northwest and southeast. The net flow out of the northeast and southwest is eight of first-year principals and another 10 existing principals. The net flow into the northwest and southeast is eight first-year principals and 12 existing principals. Transfers increase the supply pressure on the northeast and southwest and reduce the supply pressures on the northwest and southeast.

Table 15: Net Gain or Loss of Principals Due to Transfers by Region between 1994 & 2000

	Northwest	Northeast	Southwest	Southeast	Central
First-Year Principals	4	-6	-2	4	0
Existing Principals	4	-6	-4	8	-2

Source: WDE Professional Staff List Report

The final issue related to principals is the flow by grade level, which is shown in Table 16. Here the flow between grades is relatively small. High schools tend to have a net outflow, while elementary schools have a net inflow.

Table 16: Net Gain or Loss of Principals Due to Transfers by Grade Level between 1994 & 2000

	Elementary	Middle/ Junior High	High School	All Grades
First-Year Principals	2	0	-2	0
Existing Principals	1	2	-1	-2

Source: WDE Professional Staff List Report

TRANSFERS AND COMPENSATION

A central question is, Do principals transfer for higher pay? Table 17 shows the median gain in daily rate (total salary divided by contract days) paid to principals who changed jobs and those who did not between 1996 and 1999 and the proportion whose daily rate

decreased. This table also provides similar information for changes in total salary. Clearly, many principals who transferred districts did not do so to increase their daily rate. About half experienced a loss in daily rate. Although more experienced a salary increase, salary decreased for a large number of principals. This suggests that immediate increases in compensation is not a driving factor for many principal transfers within Wyoming. Other incentives such as health or life insurance are not captured here and may be a factor in transfers. If compensation is not a driving issue in principal relocation, then factors such as working and living conditions may be more important to principals in deciding where to work.

Table 17: Change in Daily Rate and Salary for Principals Who Did and Did Not Transfer between 1996 & 1999

	Median Increase in Daily Rate	Proportion Whose Daily Rate Stayed the Same or Decreased	Median Total Salary Increase	Proportion Whose Salary Decreased	Number
Those Who Changed Districts	-$0.64	48%	$1,640	40%	41
Those Who Did Not Change Districts	$9.57	6%	$1,980	3%	915

Source: WDE Professional Staff List Report

Principal Demand Summary: The increasing attrition rates and proportion of principals nearing retirement suggest that the demand for Wyoming principals has and will continue to increase. The transfer data show that small, rural schools are serving as entry points for new principals. Experienced principals in these schools more often transfer to larger schools and to cities and towns. There are some schools whose supply is generally negative in terms of the flow of principal transfers. Schools in small towns appear to lose more principals than they gain. Schools in the northeast and southwest have an outflow of principals, which increases pressure on their supply. At the same time, schools in the northwest and southeast have a net inflow, which reduces the pressure on supply.

SOURCES OF PRINCIPALS

As was mentioned earlier in the section analyzing principals transfers, the data allow examination of the positions people held before they became principals. These data are available for about 75 percent of the new principals. Those without information in the system appear to not have worked as public education professionals inside the state. This suggests that about 25 percent of Wyoming's principals either came from outside the state or worked in private schools in the state. As Table 18 shows, there is not a large difference between the characteristics of the principals who came from inside and outside of Wyoming public education in terms of age, first-year salary, and school size. These principals were about the same age, drew similar first-year salaries, and worked in schools of similar size. The only difference between these groups of principals is that principals from outside Wyoming tended to work in smaller districts. Information on the

locale and region where these different sources of principals worked can be found in Appendix F. The data in Appendix F show that principals from outside the Wyoming public education system worked less often in schools in cities or large towns, slightly less often in the central region, and slightly more often in the northwest.

Table 18: Characteristics of Principals Who Came from Inside and Outside of Wyoming Public Education between 1994 & 2000

	From Outside Wyoming Public Education	From Inside Wyoming Public Education
Average Age	45	44
Average First-Year Salary	$ 49,601	$ 49,658
Average School Enrollment	352	365
Average District Enrollment	2,694	4,771
Number	60	196

Source: WDE Professional Staff List Report & Enrollment Data

For those principals who came from within Wyoming public education, it is possible to look at sources of these principals, that is, the jobs these people held before they took principal positions. Table 19 shows the seven main sources of new principals from within Wyoming between 1994 and 2000. As expected, the largest source of new principals was assistant principals, and the third largest source of new principals was coordinators working outside of the classroom. This finding is consistent with the "traditional" career path from the classroom to an administrative job to the principal's office. The main source of principals who moved directly from the teacher workforce was general education teachers (usually elementary school teachers), followed by special education teachers.

As shown in Table 20, the proportion of female principals between 1993 and 2000 was less than a third. A central question is whether there is an untapped supply of potential principals in the female teacher workforce. The third and fourth columns of Table 19 examine this issue. The third column of the table shows the proportion of new principals who were female from each source. For example, 58 percent of the new principals who worked as special education teachers were female. The fourth column shows the proportion of females who worked in each job. For example, the proportion of female special education teachers was 84 percent. The difference between the proportion of females hired into new principal jobs and the proportion of females who worked in the job the principals came from is shown in the fifth column. This is an indicator of whether females in this job were being tapped for leadership positions at the same rate as were males. If the proportion of females who were hired as principals were equal to the proportion of females working in that job, this difference would be zero. The difference for special education teachers was 26 percent, which means that the proportion of females hired from special education into principal jobs was 26 percentage points lower than the proportion of females who worked in special education. This negative difference suggests that there is room to grow in the proportion of females moving out of these jobs into principal positions.

Table 19: Main Sources of New Principals from Inside Wyoming Public Education between 1994 & 2000

	Proportion of New Principals	Percent Female of New Principals	Percent Female in Job	Difference in Proportion of Females Hired as Principals & Proportion of Females in this Job
Assistant Principals	34%	35%	27%	8%
General Education	21%	47%	82%	-35%
Coordinators	9%	18%	38%	-20%
Special Education	6%	58%	84%	-26%
Language Arts	5%	50%	71%	-21%
Physical Education	4%	0%	43%	-43%
Vocational & Driver's Education	4%	14%	45%	-31%

Source: WDE Professional Staff List Report

The largest difference between the proportion of females hired as principals and the proportion of females in each job was found for new principals who worked as physical education teachers. This was a relatively minor source of principals, supplying 4 percent of new principals between 1994 and 2000. All the new principals whose main job was physical education the year before they were selected were men, although only 57 percent of physical education teachers are men. The opposite situation occurred for principals selected from the assistant principal workforce, which was the primary source of new principals between 1994 and 2000. This was the one job where more females were hired as principals than worked in the job, as shown by the positive difference between the proportion of males hired as principals and males in the job of assistant principal.

Since assistant principals have been the main source of new principals, it is important to understand the flow of people into this job. There were 122 first-year assistant principals between 1994 and 2000. Of those, the data set contains records on 102, or just under 85 percent. This suggests that 15 percent of Wyoming assistant principals come from outside the Wyoming public education system. Table 20 is similar to Table 19, but provides information about assistant principals.

Table 20: Main Sources of New Assistant Principals from Inside Wyoming Public Education between 1994 & 2000

	Proportion of New Assistant Principals	Percent Female of New Assistant Principals	Percent Female in Job	Difference in Proportion of Females Hired as Assistant Principals & Proportion of Females in this Job
Principals	26%	11%	23%	-12%
General Education	15%	40%	82%	-42%
Math/Science	10%	0%	35%	-35%
Social Science	8%	12%	27%	-15%
Physical Education	8%	25%	43%	-18%
Vocational & Driver's Education	8%	12%	45%	-33%

Source: WDE Professional Staff List Report

The six jobs listed in Table 20 were the source of 75 percent of the assistant principals hired from within Wyoming between 1994 and 2000. Surprisingly, the main source of new assistant principals was people who previously worked as principals. Most principals who moved to assistant principal positions stayed in the same region and grade level. But there was a general flow into larger schools and out of rural areas. About 40 percent of principals who moved to become assistant principals moved to schools in the largest enrollment quartile. About 30 percent of those who moved out of principal positions moved out of rural schools to schools in towns or cities.

Consistent with the flow of teachers into principal positions, male teachers have been more likely to become assistant principals than female teachers. The largest difference, 42 percentage points, was found for assistant principals who worked in general education. Forty percent of new assistant principals from general education were female, compared to 82 percent of the general education workforce that was female. The smallest difference of 12 percentage points was found for principals who became assistant principals. These data indicate that once women become principals, they are less likely to move to assistant principal positions.

New principals are about as likely to coach during their prior year as any education professional. Table 21 shows the proportion of new principals who coached the year before they became principals and the proportion of education professionals who coached between 1994 and 2000. Coaching is defined as people who reported a coaching assignment in any of their first 10 assignments during a year. Table 21 shows that between 1994 and 2000, a quarter of all Wyoming education professionals coached, compared to 28 percent of people who moved into principal positions. A higher proportion of men worked as coaches than women, 43 percent compared to 16 percent.

Women who became principals were slightly more likely to have coached than all women working as education professionals, 20 percent compared to 16 percent. Men who became principals were less likely to have coached than men working as education professionals, 32 compared to 43 percent. These data do not support the concept that coaching is the road to the principal's office for men or women. This may be because coaching data were only analyzed for the year prior to becoming a principal and do not take into account coaching several years prior to becoming a principal

Table 21: Proportion of New Principals who Coached the Prior Year and All Education Professionals Who Coached 1994 to 2000

	Female	Male	All
Year Prior to Principal	20%	32%	28%
All Education Professionals	16%	43%	25%

Source: WDE Professional Staff List Report

A central policy tool in principal supply is pay. Since principals and teachers work different numbers of days, their yearly salaries do not provide comparable rates of pay. A daily rate of pay provides a more comparable pay rate. The daily rate used here is total salary divided by contract days. The data used to make this calculation are only available after 1996. Using the daily rate does not account for differences in hourly rates that will occur if the number of hours in a contract day varies between teaching and administrative jobs.

Table 22 provides information for 1996 through 2000 on principals' daily rates and the change in daily rates for people who moved into principal positions. The median daily rates are shown since the number of people moving into principal jobs is small, making averages (or means) less likely to reflect the experience of most people in the sample.

The first column in Table 22 shows the median daily rate for principals, which like the average salary shown in Table 2, had its largest increase between 1997 and 1998. The second column shows the daily rate for first-year principals with prior jobs in Wyoming public education. The daily rate for this group was between $228 and $249, with the last four years holding fairly steady at between $241 and $249. The daily rate of new principals is generally increasing, although the rate slightly decreased between 1999 and 2000. The third column shows the median daily rate for jobs held before people moved into principal positions. This rate was between $210 and $229, with a large jump of $15 between 1997 and 1998. The fourth column shows the median change in daily rate experienced by people moving into principal positions. The change in daily rate was between $11 and $25 and appears to be decreasing. In other words, the increase in the rate of pay received as people move into principal positions is declining.

Table 22: Median Daily Rate for Principals and Daily Rate Change for People Moving into Principal Positions, 1996 through 2000

	Median Daily Rate for Principals	Median Daily Rate of First-Year Principals	Number of First-Year Principals	Median Daily Rate of Job Before Principal Job	Median Change in Daily Rate for Those Moving into Principal Job	Proportion Whose Daily Rate Decreased as They Moved into Principal Positions
1996	$244	$228	23	$210	$25	12%
1997	$249	$241	25	$214	$24	10%
1998	$261	$245	28	$229	$22	28%
1999	$268	$249	36	$229	$11	32%
2000	$275	$246	30			

Source: WDE Professional Staff List Report

Although the daily rate increased at the median level, not all people experienced a gain in their daily rate as they moved into principal positions. The fifth column of Table 22 shows the proportion of people whose daily rates decreased as they moved into principal positions. This proportion jumped after 1997 from 10 percent to 28 percent. It appears that in 1997 the daily rates of many positions increased, while the daily rates of first-year principals did not increase as much. This reduced the overall jump in the pay people generally received as they moved into principal positions and increased the number of people whose daily rates decreased as they became principals.

An examination of daily rates considers the amount of money people are paid for working a day. Another compensation issue central to the attractiveness of a job is total salary paid over a year. Table 23 presents information on salary changes in the same format used in Table 22 to present daily rate changes. Many of the patterns are similar. Interesting differences include a fluctuating median first-year principal salary and salary held before becoming principals.

Although the median change in salary generally became smaller in more recent years, it did not show the same linear decline observed for the change in daily rate. The proportion of those whose salaries decreased was smaller than the proportion whose daily rates decreased, and does not appear to be increasing with time.

Table 23: Median Salary for Principals and Salary Change for People Moving into Principal Positions, 1996 through 2000

	Median Salary	Median Salary of First-Year Principals	Median Salary of Job Before Principal Job	Median Change in Salary for Those Moving into Principal Job	Proportion Whose Salary Decreased as They Moved into Principal Positions
1996	$50,600		$42,166	$9,425	4%
1997	$51,503	$49,965	$42,150	$6,000	7%
1998	$54,358	$50,520	$44,842	$6,570	10%
1999	$55,475	$48,749	$43,742	$7,626	0%
2000	$56,875	$51,000			

Source: WDE Professional Staff List Report

The analysis of daily rates and total salary takes two different looks at compensation. Taken together, analyses of the two different measures of compensation do not tell exactly the same story. Both make clear that not all people who take principal positions receive higher compensation. However, trends in decreases in compensation are not the same. Although the proportion of principals who take cuts in daily rates appears to be increasing, the proportion of principals who take cuts in total salary does not appear to be increasing.

Principal Supply Summary: An important source of new principals in Wyoming is people who are not part of the Wyoming public education system. About 25 percent of new principals and 15 percent of new assistant principals came from outside the system during the period analyzed. Presumably these people came from other states, private schools, or left the system before 1993. An analysis of the flow of people from within Wyoming's public education system into the principals' job between 1994 and 2000 shows that most people, 43 percent, took the traditional route through an administrative job as an assistant principal or coordinator. The flow between principal and assistant principal is not one-way. About a quarter of new assistant principals moved from principal positions.

Compensation and principals' positions are a complicated matter. The transfer data and the fact that some take a cut in compensation to take a principal position make it clear that higher immediate compensation is not a reward for many changes. Between 1996 and 2000, about five percent of new principals received lower overall salaries and about 20 percent took cuts in their daily rate. It is possible that other factors such as the prestige of the position and locations where people work are equally as important as pay to some principals. That said, what is not accounted for in this analysis is compensation over a person's career. It is possible that although people receive lower salaries during their first year as a principal, this reduction may be temporary. Principal positions may have the potential for higher compensation over the remainder of a career than remaining in teaching.

Men are more likely to move into principal positions than women. For all jobs that feed the principalship, with the exception of assistant principal jobs, a higher proportion of men become principals than work in that job. Once a woman gets an assistant principal position, she is more likely to move into the principal's office than male assistant principals. But women face lower probabilities in moving into the assistant principal's office than men. This suggests that increasing the flow of women into assistant principal and principal positions may be a way to increase the supply of principals as the demand for principals increases. This change may already be occurring. The number of females in University of Wyoming leadership training programs is slightly more than the number of males (see Appendix G).

SUPERINTENDENT DEMAND ISSUES

Table 24 reports the same information as does Table 11, but for superintendents instead of principals. Because there are so few superintendents in Wyoming, the rates are not very stable from year to year. Over multiple years, there are no clear trends. In other words, the superintendent attrition rate appears to be fairly stable at just under 20 percent.

The proportion of superintendents who are eligible to retire in the next five years appears to be stable at about 40 percent. Comparing these patterns with those observed for principals in Table 11 suggests that the demand for superintendents due to attrition is higher than for principals, yet not growing, while principal demand is growing. Nor is superintendent demand expected to grow in the near term due to retirements, as is principal demand.

Table 24: Superintendent Attrition Rate and Eligibility to Retire by Year, 1993 through 2000

	Attrition Rate	Able to Retire within Five Years or Less
1993	12%	
1994	20%	
1995	31%	
1996	22%	
1997	15%	38%
1998	8%	42%
1999	22%	38%
2000		42%

Source: WDE Professional Staff List Report

Table 25 shows the 1997–2000 attrition rates and proportion of superintendents who were eligible for retirement by district enrollment quartile. The relationship between principal attrition and enrollment, as shown in Table 13, is fairly clear; attrition increases as school enrollment decreases. For superintendents this relationship generally holds, but is not as linear. For 1997 through 2000, the attrition rate for the smaller two quartiles of districts, with enrollments between 100 and 900, was higher than attrition noted for larger districts.

Table 25: Average 1997 to 2000 Superintendent Attrition and Eligibility to Retire by District Enrollment

	Attrition Rate	Able to Retire within Five Years or Less
Quartile 1: Smallest	16%	54%
Quartile 2	25%	27%
Quartile 3	8%	33%
Quartile 4: Largest	11%	44%
Total	15%	40%

Source: WDE Professional Staff List Report & WDE Enrollment Data

With principals there was also a relationship between eligibility for retirement and enrollment. This relationship is not present for superintendents, suggesting that although smaller districts may have faced higher demand for superintendents in the past, this trend may not continue into the future. Similar data by region can be found in Appendix E.

Superintendent transfers can be examined in the same fashion as principal transfers. Tables 26 and 27 show transfers by enrollment category and locale, respectively. Data about transfers by region can be found in Appendix E. The patterns for principal transfers by enrollment category are very similar to patterns for superintendents. First-year superintendents move out of larger districts and into smaller districts to begin their career. Experienced superintendents move in the opposite direction, but in smaller numbers and not to the largest district. As a result, smaller districts gain more superintendents than they lose.

Table 26: Net Gain or Loss of Superintendents Due to Transfers by Enrollment Category between 1994 & 2000

	Quartile 4: Largest	Quartile 3	Quartile 2	Quartile 1: Smallest
First-Year Superintendents	-7	-3	2	8
Existing Superintendents	0	2	3	-5

Source: WDE Professional Staff List Report & Enrollment Data

A very similar pattern is seen with transfers by locale. First-year superintendents transfer out of cities and towns into rural districts to take their new positions. Experienced superintendents flow out of rural areas to towns and cities. The overall flow is a gain to rural areas.

Table 27: Net Gain or Loss of Superintendents due to Transfers by Locale between 1994 & 2000

	City/Large Town	Small Town	Rural
First-Year Superintendents	-2	-8	10
Existing Superintendents	1	2	3

Source: WDE Professional Staff List Report

As was noted about principals, some education professionals move out of larger, more urban districts to take positions as superintendents in smaller, more rural districts. A few experienced superintendents move out of the smaller, more rural districts into the larger, more urban districts. The smaller, rural districts serve as a type of training ground for education leaders.

Table 28 shows the change in salary and daily rate for those superintendents who changed districts compared to those who did not. Data are available for only seven superintendents who changed districts. A majority of those seven did not gain in salary or daily rate when they changed districts. At the same time many superintendents did not see increases in their daily rate (11 percent) or total salary (25 percent). This suggests that an increase in salary or daily rate was not a prime factor for many superintendent transfers.

Table 28: Change in Daily Rate and Salary for Superintendents Who Did and Did Not Transfer between 1996 & 1999

	Median Daily Rate Change	Proportion Whose Daily Rate Stayed the Same or Decreased	Median Salary Change	Proportion Whose Salary Stayed the Same or Decreased	Number
Those Who Changed Districts	-$5.19	57%	-$3,432	57%	7
Those Who Did Not Change Districts	$8.21	8%	$2,100	1%	169

Source: WDE Professional Staff List Report

Superintendent Demand Summary: The attrition rate of superintendents fluctuated greatly from year to year, but did not show a general increase, nor did eligibility for retirement increase. This suggests that the demand for superintendents will not increase as is expected for principals. Smaller districts face higher attrition rates. Transfer data for superintendents show similar trends as do data analyzed for principals. A general flow of

new superintendents to smaller or rural schools was found; experienced superintendents moved to larger more urban schools. Some of the transfers of experienced superintendents resulted in immediate decreases in salary or daily rate, suggesting, as was found with principals, that an immediate gain in salary was not a primary reason for these transfers.

SUPERINTENDENT SOURCES OF SUPPLY

Between 1994 and 2000, 60 superintendents were new to the job in Wyoming. Thirty-five had worked in other positions within Wyoming public education, while 25, or about 40 percent, came from outside Wyoming public education. The relative characteristics of these two groups are shown in Table 29.

Table 29: Characteristics of Superintendents Who Came from Inside and Outside of Wyoming Public Education between 1994 & 2000

	From Outside Wyoming Public Education	From Inside Wyoming Public Education
Median Age	52	48
Median First-Year Salary	$ 68,000	$ 61,500
Median District Enrollment	920	763
Number	25	35

Source: WDE Professional Staff List Report & Enrollment Data

Although there was little difference between principals from inside and outside Wyoming public education, there were some differences between superintendents. Those from outside Wyoming public education were a bit older, received higher median salaries, and worked in larger districts. Information on differences in locales and regions where first-year superintendents worked by source is located in Appendix F. Generally, those from outside Wyoming public education worked slightly more often in cities and large towns with no differences by region.

Table 30 provides comparable data for superintendents as those shown for principals in Table 20, reflecting the main jobs held by the 35 education professionals who worked in Wyoming before they became principals. The majority (60 percent) moved from the principal's office to the superintendency. As was found relative to principals, females fared better in becoming superintendents if they went through the assistant's position. However, among superintendents, former assistants constitute a much smaller proportion of new superintendents (11 percent) compared to (34 percent) of principals. As discussed, females have a low probability of becoming principals. This table shows that female principals also have a low probability of moving into superintendent positions.

Table 30: Main Sources of New Superintendents from Inside Wyoming Public Education between 1994 & 2000

	Proportion of New Superintendents	Percent Female of New Superintendents from This Job	Proportion of Females in This Job	Difference in Proportion of Females Hired as Superintendents & Proportion of Females in This Job
Principal	57%	0%	22%	-22
Curriculum Coordinators or Directors	31%	36%	38%	2
Assistant Superintendent	11%	25%	13%	12

Source: WDE Professional Staff List Report

The change in median daily rate as people move into superintendent positions is shown in Table 31, just as it is shown for principals in Table 22. The median daily pay rate increased at a fairly steady pace throughout the period. The median daily rate for superintendents from 1996–2000 was about $20 higher than principals' median daily rate across this same period.

There were only 13 new superintendents from Wyoming public education between 1996 and 2000. This small group results in descriptive statistics that are rather unstable. The median daily rate of first-year superintendents and of jobs prior to becoming superintendents fluctuated year by year. As was found with transitions to principal positions, not all moves resulted in increased daily rates. About a third resulted in lower daily rates. Trends in the daily rate change and in the proportion of new superintendents whose daily rates decreased are difficult to identify due to the small number of new superintendents.

Table 31: Median Daily Pay Rate for Superintendents and Daily Rate Change for People Moving into Superintendent Positions

	Median Daily Rate for Supt.	Median Daily Rate of First-Year Supt.	Number of First-Year Supt. from WY	Median Daily Rate of Job Before Supt. Job	Median Change in Daily Rate for Those Moving into Supt. Positions	Proportion Whose Daily Rate Decreased as They Moved into Supt. Positions
1996	$261			$226	$16	50%
1997	$273	$280	4	$239	$28	0%
1998	$280	$250	3	$295	-$17	50%
1999	$288	$291	2	$287	$15	25%
2000	$299	$265	4			
1996–2000	$278	$264	13	$256	$17	31%

Source: WDE Professional Staff List Report

The total salary data for people moving into superintendent positions are similar to the daily rate data. Generally, total salaries increased as people took these new position. However, few new superintendents in 1999 and 2000 did see their overall salaries decrease as they took their new positions.

Table 32: Median Salary for Superintendents and Change in Salary for People Moving into Superintendent Positions

	Median Salary	Median Salary of First-Year Supt.	Median Salary Prior to Becoming a Supt.	Median Change in Salary when Moving into Supt. Positions	Proportion Whose Salary Decreased when Becoming Supt.
1996	$ 65,386	$ 60,575	$ 50,900	$ 10,100	0
1997	$ 67,577	$ 68,000	$ 52,600	$ 9,500	0
1998	$ 70,304	$ 64,000	$ 71,606	$ 894	50%
1999	$ 72,326	$ 71,000	$ 62,815	$ 9,685	25%
2000	$ 74,514	$ 67,500			
1996–2000	$ 68,492	$ 65,000	$ 57,039	$ 8,688	15%

Source: WDE Professional Staff List Report

Superintendent Supply Summary: A significant source of superintendent supply in Wyoming is from outside the Wyoming public education system. About 40 percent of new superintendents come from outside the Wyoming system. Superintendents from outside the system receive higher salaries and tend to work in larger districts. The main source of supply for superintendents from inside the Wyoming public education system is principals. The main source of female superintendents is assistant superintendent positions. New superintendents from within Wyoming often, but not always, receive increases in pay as they take their new positions. The proportion that does not receive

increases in daily rates does not appear to be increasing, although the proportion that took cuts in total salary was higher in 1998 and 1999 than in 1997 and 1998.

CONCLUSIONS AND DISCUSSION

This report provides information on the Wyoming school and district leadership workforce including trends in attrition, retirement, and sources of supply. The increase in principals who will soon be eligible for retirements suggests that the demand for new principals will increase. The demand for superintendents does not show similar trends.

Almost all education leaders come from inside the education workforce, but not all come from within the state's education workforce. Wyoming appears to be able to attract significant numbers of leaders from outside the state's education workforce; 15 percent of assistant principals, 25 percent of principals, and 40 percent of superintendents come from outside Wyoming's public education system. When recruiting from inside the education system, many leaders come through traditional routes from classrooms, through administrative positions, into principal positions, and then into superintendent positions.

Women appear to be a source of education leaders that is not completely tapped. The proportion of female principals has increased significantly; the largest increases have occurred in elementary grades and in cities and large towns. The proportion of female superintendents has also grown; the largest growth has occurred in smaller and rural districts. Despite this growth in female leadership in Wyoming, the proportion of women working in teaching jobs is much higher than the proportion of females hired into leadership positions. Effectively moving more females from classrooms into leadership positions may be the easiest way to increase the supply of qualified leaders.

This change may be occurring. The number of females in training for leadership positions is slightly higher than the number of males. The University of Wyoming reports that just over half (51%) of students in the university's 2001 Educational Leadership program are females (see Appendix G). This suggests that the pool of qualified females prepared for leadership positions is, or may soon be, as large as the pool of qualified male applicants.

Efforts to increase the supply of female leaders may be informed by the experiences of existing female leaders. These efforts should focus on the factors that affect women's decisions and transition points that steered them from the classroom into administration. Armed with this knowledge, policymakers will be better able to craft effective policies and programs to increase the supply of Wyoming leaders.

REFERENCES

Darling-Hammond, L., Berry, B., & Thoreson, A. (2001). Does teacher certification matter? Evaluating the evidence. *Educational Evaluation and Policy Analysis, 23*(1), 57–77.

Goldhaber, D. D., & Brewer, D. J. (2001). Evaluating the evidence on teacher certification: A rejoinder. *Educational Evaluation and Policy Analysis, 23*(1), 79–86.

Manley, M. (2000, September). *The status of rural education in Wyoming: An overview.* Aurora, CO: Mid-continent Research for Evaluation and Learning.

Reichardt, R. (2002). *Teacher supply and demand in the state of Wyoming.* Aurora, CO: Mid-continent Research for Education and Learning.

Wendel, F. C., Rippe, K., Bartee, R., Lillis, T., Roberts, J. A., Duffy, M., et al. (1994, February). *Supply and demand of school administrators in Nebraska.* Lincoln, NE: Nebraska Council of School Administrators.

Wyoming Department of Employment. (2002). *Wyoming labor market information.* Retrieved December 5, 2001, from http://lmi.state.wy.us/

APPENDIX A: CROSSWALK BETWEEN DISTRICTS, REGIONS, LOCALES, AND ENROLLMENT QUARTILES (IN 2000)

District	District Number	Locale	Region	Enrollment (2000) Quartile
Albany Co School Dist 01	101	City/Large Town	SE	4
Big Horn Co School Dist 01	201	Rural	NW	2
Big Horn Co School Dist 02	202	Rural	NW	2
Big Horn Co School Dist 03	203	Rural	NW	2
Big Horn Co School Dist 04	204	Rural	NW	1
Campbell Co School Dist 01	301	Small Town	NE	4
Carbon Co School Dist 01	401	Small Town	Cen.	3
Carbon Co School Dist 02	402	Rural	Cen.	2
Converse Co School Dist 01	501	Small Town	Cen.	3
Converse Co School Dist 02	502	Rural	Cen.	2
Crook Co School Dist 01	601	Rural	NE	3
Fremont Co School Dist 01	701	Small Town	NW	3
Fremont Co School Dist 02	702	Rural	NW	1
Fremont Co School Dist 06	706	Rural	NW	1
Fremont Co School Dist 14	714	Rural	NW	2
Fremont Co School Dist 21	721	Rural	NW	1
Fremont Co School Dist 24	724	Rural	NW	1
Fremont Co School Dist 25	725	Small Town	NW	4
Fremont Co School Dist 38	738	Rural	NW	1
Goshen Co School Dist 01	801	Small Town	SE	3
Hot Springs Co Sch Dist 01	901	Small Town	NW	2
Johnson Co School Dist 01	1001	Small Town	NE	3
Laramie Co School Dist 01	1101	City/Large Town	SE	4
Laramie Co School Dist 02	1102	Rural	SE	3
Lincoln Co School Dist 01	1201	Small Town	SW	2
Lincoln Co School Dist 02	1202	Rural	SW	4
Natrona Co School Dist 01	1301	City/Large Town	Cen.	4
Niobrara Co School Dist 01	1401	Rural	SE	1
Park Co School District 01	1501	Small Town	NW	3
Park Co School District 06	1506	Small Town	NW	4
Park Co School District 16	1516	Rural	NW	1
Platte Co School Dist 01	1601	Small Town	SE	3
Platte Co School Dist 02	1602	Rural	SE	1
Sheridan Co School Dist 01	1701	Rural	NE	3
Sheridan Co School Dist 02	1702	Small Town	NE	4
Sheridan Co School Dist 03	1703	Rural	NE	1
Sublette Co School Dist 01	1801	Rural	SW	2

District	District Number	Locale	Region	Enrollment (2000) Quartile
Sublette Co School Dist 09	1809	Rural	SW	2
Sweetwater Co Sch Dist 01	1901	Small Town	SW	4
Sweetwater Co Sch Dist 02	1902	Small Town	SW	4
Teton Co School Dist 01	2001	Small Town	SW	4
Uinta Co School Dist 01	2101	Small Town	SW	4
Uinta Co School Dist 04	2104	Rural	SW	2
Uinta Co School Dist 06	2106	Rural	SW	2
Washakie Co School Dist 01	2201	Small Town	NW	3
Washakie Co School Dist 02	2202	Rural	NW	1
Weston Co School Dist 01	2301	Small Town	NE	3
Weston Co School Dist 07	2307	Rural	NE	1

APPENDIX B: ENROLLMENT AND POPULATION PROJECTIONS BY LOCALE

Enrollment by Locale

	1993	1994	1995	1996	1997	1998	1999	2000
Small Towns	51,507	51,052	50,817	50,284	48,965	47,870	46,206	44,813
City/Large Towns	31,507	31,197	31,052	30,830	30,216	29,731	29,282	29,093
Rural	17,846	18,032	17,957	17,634	17,323	16,819	16,395	15,645

Source: WDE Enrollment Data

School-Age Population Projections by Locale

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Small Town	62,823	62,008	61,192	60,276	59,360	58,449	57,538	56,980	56,421
City/Large Town	36,879	36,451	36,023	35,653	35,282	34,850	34,417	34,057	33,697
Rural	9,315	9,145	8,974	8,894	8,814	8,744	8,673	8,607	8,540

Source: Wyoming Department of Administration: http://eadiv.state.wy.us/pop/pop.htm

APPENDIX C: CROSSWALK BETWEEN ANALYSIS JOB TYPES AND WDE ASSIGNMENTS

Job Type	Parent Type (From WDE)		Additional Assignments in this Job Type	
Language Arts	G	Language Arts		
Math & Science	H	Mathematics		
	I	Science		
	IA	Life Science		
	IB	Physical Science		
Social Sciences	J	Social Studies/Sciences		
	JA	Geography		
	JB	History		
PE	K	Physical Education and Health		
Humanities	MA	Art		
	MB	Music		
	MC	Drama and Theater		
Vocational & Driver's Ed.	NA	Agriculture		
	NB	Marketing		
	NC	Family and Consumer Science		
	ND	Trade and Industry		
	NE	Health Occupations		
	NF	Business		
	NG	Technology Education		
	X	Other	DRE	Driver Education
Coaching	KB	Coaching		
	X	Other	ADV	Advisor/Sponsor Any Club Activity - Not Coaching
Foreign Language	L	Foreign Language		
Computer	X	Other	CPL	Computer Literacy/Lab
	X	Other	COM	Computer/Tech Coordinator
	X	Other	CPS	Computer Science
Student Services	BA	Guidance Counselors		
	BB	Library Media Staff		
	BD	Student Support Staff -- Professional		
Special Education	OA	Special Education		
	OC	Gifted & Talented		

Job Type	Parent Type (From WDE)		Additional Assignments in this Job Type	
Remediation	OB	Remediation		
	AA	Teacher		
General Education	F	General/Multidisciplinary		
Other Admin	BF	Coordinators and Supervisors		
School Staff	CH	Food Service Staff		
	CN	Other Staff		
Central office	CC	Central Office Administrators		
School Building Admin	CA	School Building Administrators		
Collaborative	X	Other	COL	Collaboration (PTSB Approved)

APPENDIX D: PRINCIPALS

Principals by Reported Grade Level, 1993 through 2000

	1993	1994	1995	1996	1997	1998	1999	2000
Elementary	141	143	139	137	135	133	125	138
Middle/Junior High	51	52	49	49	46	47	45	44
High School	58	59	65	64	62	69	65	68
All Grades	14	15	18	13	23	22	27	10
Total	264	269	271	263	266	271	262	260

Source: WDE Professional Staff List Report

Principal Attrition and Retirement Eligibility Between 1996 and 2000

	Attrition Rate	Able to Retire within Five Years or Less
Northwest	14%	20%
Northeast	15%	17%
Southwest	15%	20%
Southeast	12%	23%
Central	12%	17%
Average	14%	20%

Source: WDE Professional Staff List Report

Principal Attrition and Retirement Eligibility Between 1996 and 2000

	Attrition Rate	Able to Retire within Five Years or Less
City/Large Town	10%	20%
Small Town	15%	19%
Rural	15%	20%

Source: WDE Professional Staff List Report

APPENDIX E: SUPERINTENDENTS

Median Age of Principals by Region, 1993 through 2000

	Northwest	Northeast	Southwest	Southeast	Central
1993	51	52	55	53	48
1994	56	52	55	55	49
1995	53	53	49	56	50
1996	53	54	50	53	50
1997	53	54	51	54	51
1998	53	54	52	55	50
1999	54	55	53	53	50
2000	54	56	54	54	43

Source: WDE Professional Staff List Report

Superintendent Attrition and Retirement Eligibility Between 1996 and 2000

	Attrition Rate	Able to Retire within Five Years or Less
Northwest	20%	45%
Northeast	8%	53%
Southwest	10%	30%
Southeast	10%	46%
Central	27%	10%
Average	15%	40%

Source: WDE Professional Staff List Report

Superintendent Attrition and Retirement Eligibility Between 1996 and 2000

	Attrition Rate	Able to Retire within Five Years or Less
City/Large Town	11%	50%
Small Town	11%	35%
Rural	18%	42%

Source: WDE Professional Staff List Report

Net Gain and Loss of Superintendents Due to Transfers Between 1994 & 2000 by Region

	Northwest	Northeast	Southwest	Southeast	Central
First-Year Principals	5	-2	0	-1	-2
Existing Principals	-5	1	3	0	1

Source: WDE Professional Staff List Report

APPENDIX F: WHERE PRINCIPALS & SUPERINTENDENTS WORKED WHO CAME FROM INSIDE AND OUTSIDE WYOMING PUBLIC EDUCATION 1994 THROUGH 2000

Sources of Principals and Where They Worked by Region

	From Outside Wyoming Public Education	From Inside Wyoming Public Education
Northwest	25%	20%
Northeast	17%	18%
Southwest	27%	22%
Southeast	18%	18%
Central	13%	21%

Source: WDE Professional Staff List Report

Sources of Principals and Where They Worked by Locale

	From Outside Wyoming Public Education	From Inside Wyoming Public Education
City/Large Town	7%	26%
Small Town	48%	35%
Rural	45%	39%

Source: WDE Professional Staff List Report

Sources of Superintendents and Where They Worked by Region

	From Outside Wyoming Public Education	From Inside Wyoming Public Education
Northwest	52%	49%
Northeast	12%	9%
Southwest	16%	23%
Southeast	8%	11%
Central	12%	9%

Source: WDE Professional Staff List Report

Sources of Principals and Where They Worked by Locale

	From Outside Wyoming Public Education	From Inside Wyoming Public Education
City/Large Town	8%	9%
Small Town	24%	34%
Rural	68%	57%

Source: WDE Professional Staff List Report

APPENDIX G: 2001 PARTICIPANTS IN UNIVERSITY OF WYOMING LEADERSHIP TRAINING PROGRAMS BY SEX

2001 Participants in University of Wyoming Leadership Training Programs by Sex

	Principal Endorsement Program	Principal Preparation Program	Doctoral Program	Total
Male	16	23	22	61
Female	23	28	12	63

Source: Personal correspondence with University of Wyoming School of Education

RESEARCH-BASED INNOVATIONS

Two factors greatly influence the success of comprehensive school reform. Selecting or developing an effective, research-based model or innovation is vitally important. Equally important, however, is adopting a model that matches school needs and goals.

District and school leaders may be asking, "How do I know whether a model is effective, based on research, and likely to work for us?" This is an essential question. Answering it involves critically examining the model in terms of the underlying theory, its successful implementation and replication, its effect on student achievement, and the studies validating its claims of effectiveness. (See sidebar.)

Although this process takes time, given the amount of resources that will be invested in reform, it's well worth the effort. Don't be reluctant to ask hard questions of model developers or to press for more evidence that a program will be effective. Thoroughly investigating the strengths of a proposed model upfront can save a tremendous amount of time and money later, help ensure higher student achievement, and increase teacher morale and community support in the long run.

Recently, a number of leading education organizations commissioned a study of comprehensive school reform models to examine claims made by model developers (see American Institutes for Research, 1999). Of the 24 models reviewed, only three offered "strong evidence" of positive effects on student achievement. Five models showed "promising evidence" of positive effects. Six offered "marginal evidence." One offered "weak evidence." For the remaining nine models, there were no methodically rigorous studies that demonstrated higher student test scores.

The message here is "buyer beware." Before investing a great deal of time and money on a

Evaluating Innovations in Instruction

Theory
Are there materials available that explain the underlying theory and that include references to research?

Implementation
Has the model been fully implemented in multiple sites for a number of years?

Has the model been implemented in sites that are similar to the target school (e.g., in terms of grade levels and demographics)?

Replication
Has the model been replicated successfully in a wide range of schools and districts (e.g., urban, rural, suburban)?

Evaluation
Is there evidence of student achievement gains at the sites that have implemented the model?

Validation
How many reliable studies validate or refute claims of effectiveness?

Source: Adapted from *Catalog of School Reform Models*, by the Northwest Regional Educational Laboratory, 1998, Portland, OR: Author.

comprehensive school reform approach, district and school leaders should thoroughly study a proposed model to assess the likelihood that it will meet identified goals.

THE ROLE OF DISTRICT LEADERS

Selecting a research-based approach that best meets the needs of individual schools should be left to those who closely work with students: teachers and school leaders. Nonetheless, there are a number of things district leaders can do to help school-level teams make wise, well-informed decisions.

Guidelines for District Leaders

- Help principals and other staff members gather information about comprehensive school reform models, especially evaluations of their effectiveness.
- Give school leaders the data they need to identify specific school strengths and challenges. Dropout rates, attendance rates, and data on student performance are particularly useful.
- Sponsor staff development activities that help school leaders, teachers, and staff members strengthen their ability to analyze research, interpret data, and draw appropriate conclusions.
- Emphasize that using research-based practices is a core district value and commitment.

THE ROLE OF SCHOOL LEADERS

School leaders must ensure that quality research guides any reform initiative. They must lead the process of carefully reviewing research studies to determine their validity, reliability, and fit with the needs and goals of the school.

Guidelines for School Leaders

- Set a clear expectation that high-quality research will guide the school's comprehensive school reform effort.
- Understand the characteristics of high-quality research.
- Seek out research that informs all aspects of the school's comprehensive school reform efforts.
- Gain more knowledge and skills in analyzing and interpreting research findings. Help teachers and school staff develop these strengths as well.
- Lead the process of evaluating the strengths of comprehensive school reform models that might be adopted.
- Help teachers become good consumers of research. Share information about research-based innovations in meetings, newsletters, and via e-mail.

KEY CHALLENGE: JUDGING THE MERIT OF RESEARCH STUDIES

Developers of many comprehensive school reform models cite research studies to back up claims of effectiveness. But a key challenge for potential users is determining the validity and reliability of that research.

It's not necessary – nor is it feasible – to thoroughly investigate all of the research related to every available approach. But once the list of available reform models has been narrowed to a select few that might be implemented, it's time to consider the quality of the underlying research. There are a number of questions teachers and school leaders should ask to guide this process:

- Does the reform program follow logically from the research it is based upon? That is, does the reform truly reflect the strategies found to be effective in the research?
- Did the study use appropriate indicators of abstract concepts such as student motivation?
- Did the design of the study adequately control for alternate explanations of the findings?
- Did the study methodology adequately guard against bias and ensure objectivity?

Where To Begin

Involve the school community in identifying criteria for developing a "short list" of possible reform programs to examine in more detail.

Learn about the characteristics of high-quality research, perhaps through study circles or by working with outside consultants.

Use this information to scrutinize claims made by model developers regarding the effectiveness of their reform programs.

- Can the results of the study be generalized to other student groups and contexts? In other words, will the study findings apply to our students and our school?

These questions are just a few of the many questions that can be asked when reviewing comprehensive school reform models. For further guidance on evaluating research studies and reform models, see *Research and Evaluation in Education and the Social Sciences* (Smith & Glass, 1987).

RESOURCES

American Federation of Teachers. (1998). *What works: Seven promising reading and English language arts programs.* Washington, DC: Author. Available: http://www.aft.org/edissues/whatworks/wwenglish.htm

American Federation of Teachers. (1998). *What works: Six promising schoolwide reform programs.* Washington, DC: Author. Available: http://www.aft.org/edissues/whatworks/wwschoolwidereform.htm

American Federation of Teachers. (1999). *Improving low-performing high-schools: Ideas & promising programs for high schools.* Washington, DC: Author. Available: http://www.aft.org/edissues/whatworks/wwimprove.htm

American Federation of Teachers. (1999). *What works: Five promising remedial reading intervention programs.* Washington, DC: Author. Available: http://www.aft.org/edissues/whatworks/wwreading.htm

American Institutes for Research. (1999). *An educators' guide to schoolwide reform.* Arlington, VA: Educational Research Service. Available: http://www.aasa.org/reform/index.htm

Hassel, B. (1998) *Making good choices: A guide for schools and districts.* Oakbrook, IL: North Central Regional Educational Laboratory. Available: http://www.ncrel.org/csri/choices/intro.htm

Laboratory for Student Success. (n.d.). *Achieving student success: An online interactive tool: A handbook of widely implemented research-based educational reform models.* Philadelphia: Author. Available: http://www.reformhandbook-lss.org

Northwest Regional Educational Laboratory. (1998). *Catalog of school reform models.* Portland, OR: Author. Available: http://www.nwrel.org/scpd/natspec/catalog/index.html

Smith, M. L., & Glass, G. (1987). *Research and evaluation in education and the social sciences.* Englewood Cliffs, NJ: Prentice-Hall.

Traub, J. (1999). *Better by design? A consumer's guide to schoolwide reform.* Washington, DC: The Fordham Foundation. Available: http://www.edexcellence.net/library/bbd/betterbydesign.html

Wenger, P. (1999). Selecting and implementing research-based instruction. *Noteworthy perspectives on comprehensive school reform.* Aurora, CO: Mid-continent Regional Educational Laboratory. Available: http://www.mcrel.org/products/noteworthy/csrd.asp

Web Sites

National Clearinghouse for Comprehensive School Reform. http://www.goodschools.gwu.edu/

U.S. Department of Education. Guidance on the Comprehensive School Reform Demonstration Program. http://www.ed.gov/offices/OESE/compreform/csrdgui.html#B1

COMPREHENSIVE DESIGN

What exactly does it mean for a reform program to be "comprehensive"? There seems to be a great deal of misunderstanding, particularly among schools and districts that have applied for funding under the Comprehensive School Reform Demonstration legislation. Many school and district leaders have mistakenly believed that simply adopting one of the nationally known "comprehensive school reform" models is all it takes to bring about the complex changes needed to improve student achievement.

It is easy to see how many schools have focused their attention more on finding the right reform *model* rather than on developing a complete reform *program.* Listings of models have been published in many places, model developers are featured at showcases, and guidelines for selecting a model are widely available.

In fact, adopting a reform model – usually an externally developed, research-based approach to improvement – is only one possible step in the process of creating a larger, ongoing comprehensive school reform effort. If a model (or models) is adopted, it should be integrated with the larger plan for reform into a coherent strategy for school improvement. The focus of a comprehensive school reform program should be the entire school community. All aspects of school improvement – including professional development, governance, external assistance, and financial resources – should work together to strengthen the school's core academic program.

Characteristics of Comprehensive School Reform

Integrates the following components into a coherent, schoolwide — *comprehensive* — program:

- Curriculum, instruction, and assessment strategies based on reliable research and best practices
- Ongoing professional development
- School governance
- Meaningful parent and community involvement
- Evaluation

Is guided by measurable goals and benchmarks that are tied to state standards

Is supported by faculty, administrators, and staff members

Uses all available internal and external resources — financial, human, and technological

More and more school and district leaders have come to appreciate the importance of a systematic approach to school reform that coordinates all aspects of a school's operations to help students achieve challenging academic standards. Clearly, being comprehensive is the challenge of school reform. As shown in the sections that follow, there are ways that district and school leaders can ensure that this challenge is met.

THE ROLE OF DISTRICT LEADERS

The primary role of district leaders is to establish strong, clear direction that helps schools set reform goals and begin the process of aligning curriculum, instruction, and assessment. However, the direction set should be broad enough to allow schools to make site-based decisions about how to align the various components of reform.

Guidelines for District Leaders

- Lead a collaborative effort to create overall vision, mission, and goals.
- Involve representatives from all buildings in the development of a districtwide comprehensive school reform plan.
- Set the expectation that school improvement plans will address all of the components of comprehensive school reform.
- Provide resources for professional development and other technical assistance to help school staff learn how to address the components.
- Provide schools with choices about how to use funds and how to govern themselves.
- Encourage schools to articulate how their reform efforts are linked to district goals and reform efforts.

THE ROLE OF SCHOOL LEADERS

The primary role of school leaders is to help everyone keep the big picture of comprehensive school reform in mind. It's easy for people to get caught up in details and day-to-day problems and get off task. Principals and other school leaders must take the lead in keeping everyone focused on the larger vision and goals of reform.

Guidelines for School Leaders

- Use every opportunity to keep the vision and goals for reform foremost in everyone's mind and tied to school activities.
- Stay focused on what it means to be comprehensive. As a challenge arises in one aspect of the school (e.g., a new state assessment is mandated), carefully consider how it will affect the rest of the school (e.g., the culture and climate).
- Establish organizational structures such as grade-level teams. Involve all staff in decision making related to the selection, implementation, and evaluation of the approach to reform.
- Work with staff to build understanding of how the components of reform will work together.
- Provide opportunities for staff to discuss how the components support one another in practice.
- Look for evidence that the components support, rather than interfere with, one another.

KEY CHALLENGE: MAKING THE COMPONENTS WORK TOGETHER

A key challenge in designing a comprehensive school reform plan is figuring out how to make the various components work together in a coherent way. The irony is that the term "comprehensive" may suggest that school reforms need to be broad and expansive, addressing everything under the sun, so to speak. But this is not the case. Instead, schools need to be focused on a single goal or set of goals that guide all their reform efforts. In this way, reform efforts become more integrated and, thus, more comprehensive.

The first step in designing a comprehensive school reform plan is to focus on clearly defined, broadly agreed-upon goals. Students' achievements of high academic standards is a good place to begin when establishing goals.

For Example . . .

Goal: 80 percent of students will reach proficient levels for mathematics standards as gauged by their achievement on the statewide assessment.

Next, schools should determine whether the "stuff" of schooling (e.g., curriculum, instruction, assessment) will help them accomplish those goals.

For Example . . .

Does the curriculum reflect the knowledge and skills addressed on the test? What new instructional strategies do teachers need to use to increase students' understanding and skill?

Where to Begin

Create a clear vision for reform that is tied to state and district standards.

Identify all of the aspects of the school that may be affected by or integral to reform.

Consider the schoolwide effects of the proposed plan. Does the plan address the various aspects of the school system (i.e., the "stuff" and the "people," as well as the "structures" that bring them together)?

Make sure stakeholders understand and endorse the reform plan.

The next step is to make sure that the "people" element of schools (e.g., professional development, school climate, behavior management) will help school leaders reach their identified goals.

For Example . . .

What professional development experiences do teachers need to help improve students' achievement levels on the statewide test? How can teachers better share information about students' progress?

Finally, school leaders should strive to make sure their organizational "structures" (e.g., accountability systems, community engagement, and the use of resources such as time and money) also support school goals.

For Example . . .

How should we convey students' progress to parents?

In practice, the school's comprehensive reform plan should result in an integrated, coherent approach designed to meet identified goals. As the plan is implemented and refined along the way, teachers and school leaders should continue to look at the schoolwide impact of the program particularly in terms of student achievement. McREL's (2000) *Asking the Right Questions: A Leader's Guide to Systems Thinking About School Improvement* is one tool school leaders might use to determine whether school improvement efforts do, in fact, address all parts of their school system in a comprehensive, integrated way that results in higher achievement for all students.

RESOURCES

Fuhrman, S., Elmore, R., & Massell, D. (1993). School reform in the United States: Putting it into context. In S. Jacobsen & R. Berne (Eds.), *Reforming education: The emerging systemic approach.* Thousand Oaks, CA: Corwin Press.

Hassel, B. (1998). *Comprehensive school reform: Making good choices for your school.* Oakbrook, IL: North Central Regional Educational Laboratory. Available: http://www.ncrel.org/csri/choices/intro.htm

McREL. (2000). *Asking the right questions: A leader's guide to systems thinking about school improvement.* Aurora, CO: Author.

U.S. Department of Education. (2000). *Comprehensive School Reform Demonstration Program continuum for assessing the comprehensiveness of school reform plans.* Washington, DC: Author.

Web Sites

National Clearinghouse for Comprehensive School Reform. http://www.goodschools.gwu.edu/

U.S. Department of Education. Guidance on the Comprehensive School Reform Demonstration Program. http://www.ed.gov/offices/OESE/compreform/csrdgui.html

RESOURCE ALLOCATION

When asked what it takes to reform schools, most people say "money." But it takes more than just money. The success of reform hinges largely on whether schools and districts know how to effectively use available federal, state, local, and private resources to improve student achievement.

An important first step is determining how much the new reform effort will cost. Think about staff needs as well as the cost of professional development, consultants, materials, substitutes, and release time.

Once the total cost of the effort has been determined, take stock of available resources. What sources of funding are available, and how can they best be used? This process is somewhat like deciding what to make for dinner by looking into a refrigerator. There are many items to consider – some are hidden, some aren't needed, some are used infrequently, and some are used all the time, so not much is left.

Finding the best way to use resources also involves knowing how to efficiently combine funds from various sources. Reducing duplication and fragmentation of services increases the likelihood that improved student learning will be realized.

THE ROLE OF DISTRICT LEADERS

One of the primary responsibilities of district leaders is to create policies that give schools the flexibility to use resources as they see fit. This is especially true in terms of staff assignments.

District leaders also can help by defining a clear goal for reform, developing standards and assessments to focus efforts at individual school sites, and making it clear to school leaders that resources should be allocated in ways that support these goals and, ultimately, student learning.

Guidelines for District Leaders

- Understand how federal requirements for combining funds apply to your district. (See sidebar for examples of funding sources.)

Federal Funding Streams that Might be Combined

- Even Start
- Migrant Education
- Eisenhower Professional Development
- Safe and Drug Free Schools and Communities
- Innovative Education Program
- Federal Bilingual Education Program
- Immigrant Education Act Program
- Indian Education Act Program
- McKinney Homeless Assistance Act Program
- Carl Perkins Vocational Program

- Make sure the district's reform plan spells out how resources will be coordinated across the district. This plan can serve as a model for school leaders to follow in coordinating resources in their individual schools.
- Involve a representative group of staff and parents, including those of special education children, in the resource allocation planning process.

- Earmark or set aside a funding pool to "jump start" the reform process. Also consider resources needed to support ongoing efforts.
- Give school leaders the authority to reallocate budgets and make decisions about staff assignments.
- Establish, build, and capitalize on partnerships with a range of community groups, from education foundations and local businesses to intermediate service agencies, higher education institutions, and neighboring districts.
- Use contract negotiations as venues for exploring creative solutions to resource allocation challenges.

THE ROLE OF SCHOOL LEADERS

School leaders guide and set the tone for the school-level resource allocation process. They play a key role in building understanding about the process so that people support rather than resist it. They can inspire creative solutions to resource problems by modeling how to move beyond assumptions about what is possible and explore each situation with an open mind.

Guidelines for School Leaders

- Seek out information about successful approaches to resource allocation. Read articles and other publications (such as those suggested in this folio) about approaches other schools have taken.
- Know the strengths of the staff. Develop an inventory of staff members' knowledge, skills, and interests. Look for ways to better capitalize on these strengths.
- Lead the process of gathering information about current spending, needs, and available resources.
- Work with the staff to identify the implications of reallocating resources, for example, in terms of changes in staffing, curricula, and relationships.
- Bring together program leaders to identify ways to use resources more efficiently. How is money being spent now? Are there common needs? Can resources serve more than one purpose? The process of figuring out how to "stretch dollars" can point to better solutions in the long run.
- Keep everyone informed and involved in the process. Communicating along the way gives stakeholders a chance to digest ideas and offer useful feedback before plans are set in stone.
- Advocate for decision-making power to control the school-level budget.
- When seeking funds, present organized, clear plans and support arguments with research and best practice.
- Seek waivers to policies or changes in policies at the state, district, or school level in order to allocate resources effectively.
- Build support for programs that have benefitted from a reallocation of resources by monitoring and reporting success.

KEY CHALLENGE: FINDING RESOURCES

A priority for most schools is finding additional resources for instruction, professional development, and other priorities. Developing a plan that results in these additional resources may mean looking at resources in new ways.

One way to direct adequate resources to key areas is to rethink teachers' schedules and responsibilities. For example, consider creating staggered schedules, replacing full-time with part-time positions, or adding teachers who have expertise in target content areas.

Nonacademic programs are another area in which resources might be reallocated. Consider moving support staff from nonacademic subjects to core subject areas. Create larger groups of students for nonacademic subjects. Refocus nonacademic programs so they incorporate the teaching of core, academic knowledge and skills.

Find new ways to creatively use financial resources. For example, consider new uses of Title I funds, or shift resources to help teachers learn to use new curricula or instructional strategies.

Finally, advocate for increased funding at the state and local levels. Find ways to let policymakers and the public know about the tremendous potential of comprehensive school reform to improve student achievement.

Teachers, staff members, and other stakeholders sometimes resist efforts to allocate or reallocate resources to support comprehensive school reform because they fear losing their power or their jobs. In truth, some difficult decisions regarding personnel may have to be made. In many cases, however, people can simply shift roles, but keep their jobs and, in fact, end up being more productive.

Where to Begin

Set up a resource allocation planning team.

Estimate the total cost of the reform program.

Identify available resources.

Identify federal, state, district, and local sources of additional funding.

Determine how funds from various sources might be efficiently combined.

Principals and other school leaders should work to create a sense of shared commitment to reform. This may take time. It is not enough simply to tell stakeholders that comprehensive school reform can succeed if everyone works together. Teachers, staff members, parents, and other stakeholders may have questions, concerns, and useful ideas that call for meaningful dialogue. Having a well-thought-out plan, as well as research to support claims, can make a difference. Parents, union representatives, and other stakeholders are more likely to support school-level decision making about allocating resources if they see that a future path has been thoughtfully charted.

RESOURCES

Arnold, M., Simms, N., & Wilber, D. (1999). Innovative approaches to maximizing resources. *Noteworthy Perspectives on comprehensive school reform* (pp. 49-55). Aurora, CO: Mid-continent Research for Education and Learning. Available: http://www.mcrel.org/products/noteworthy/csrd.asp

Johnson, J., Jr. (1999). *A model for coordinating funding for improved student achievement.* Austin, TX: Support for Texas Academic Renewal Center, University of Texas at Austin.

Miles, K. (1995). *Freeing resources for improving schools: A case study of teacher allocation in Boston Public Schools.* Educational Evaluation and Policy Analysis, 17(4), 476-493.

Norton, M. S., & Kelly, L. (1997). *Resource allocation: Managing money and people.* Larchmont, NY: Eye on Education.

Odden, A. (1995). *Linking school finance to systemic reform: A commentary.* Philadelphia, PA: Consortium for Policy Research in Education, Graduate School of Education, University of Pennsylvania.

Odden, A. (1997). *How to rethink school budgets to support school transformation.* Getting Better By Design Series: Vol. 3. Arlington, VA: New American Schools.

Odden, A. (1999). Making better use of resources for educational reform. In David D. Marsh (Ed.), *ASCD Yearbook 1999: Preparing our schools for the 21st Century* (pp. 143-164). Alexandria, VA: Association for Supervision and Curriculum Development.

Odden, A., Archibald, S., & Tychsen, A. (1999). *Farnham Elementary School: A case study of resource reallocation.* Madison, WI: Consortium for Policy Research in Education, University of Wisconsin-Madison.

Support for Texas Academic Renewal (STAR) Center. (1997). *Show Me the Money game.* Available at http://www.starcenter.org

Ware, K. (1999, July). *Allocating resources for comprehensive school reform.* Presentation at Wisconsin Comprehensive School Reform Leadership Institute, July 1999, Minaqua, Wisconsin.

Web Sites

National Clearinghouse for Comprehensive School Reform. http://www.goodschools.gwu.edu/

U.S. Department of Education. Guidance on the Comprehensive School Reform Demonstration Program. http://www.ed.gov/offices/OESE/compreform/csrdgui.html#B1

EVALUATION

Evaluation is a valuable process for gathering information about reform. The process can help answer an array of questions, such as, "Are things going as planned?" "Are we beginning to see the results we anticipated?" "What changes should we make, if any, to ensure success?" The answers to these questions can help refine reform plans as necessary to enhance their impact on student learning.

The evaluation process should consider the effectiveness of program implementation as well as the extent to which program outcomes have been met. Thus, goals as well as related benchmarks should be set. For example, a district might set a goal that "all 3rd grade students will be reading at grade level within two years." A related milestone might be that "75% of students will be reading at grade level within one year." Evaluation can lead to meaningful conclusions when program goals and benchmarks are clear and measurable.

THE ROLE OF DISTRICT LEADERS

District leaders play a key role in supporting schools in their efforts to evaluate their comprehensive school reform plans. District support comes in many forms – from communicating about the importance of evaluation to allocating resources for planning, conducting, and following up on the evaluation.

Guidelines for District Leaders

- Communicate the importance of evaluation and the expectation that program implementation and outcomes will be examined.
- Provide the support schools need to set clear, measurable program goals and identify milestones or benchmarks against which the progress of reform can be assessed.
- Designate resources to support evaluation, including funds for technical expertise and professional development to help staff members gain the knowledge and skills they need to effectively collect and use data to inform decision making.

A Five-Stage Evaluation Process

1. Plan the Evaluation
Define the purpose of the evaluation. Identify program evaluation requirements that must be met. Identify stakeholder expectations, available resources, and staff members' areas of expertise.

2. Design the Evaluation
Link the evaluation to the program. Identify evaluation questions, data sources, variables, and measures. Develop a plan of action.

3. Conduct the Evaluation
Obtain or create data collection instruments. Collect and analyze data.

4. Report the Findings
Organize study findings. Select appropriate reporting media and formats. Disseminate the findings.

5. Encourage Stakeholders to Use Findings
Create opportunities for stakeholders to discuss findings. Follow up with stakeholders to determine how they are using the findings. Revise the evaluation plan as needed.

Source: Cicchinelli & Barley, 1999

- ❖ Help school leaders negotiate with model developers and other providers to ensure that prescribed evaluation activities also support the school's evaluation needs.
- ❖ Work with school leaders to design an evaluation program that incorporates input from parents and other community members and reports back results.
- ❖ Clarify how evaluation results will be reported to and used by the board and other stakeholders.
- ❖ Remove policy or procedural barriers to planning, conducting, and following through on the evaluation.

THE ROLE OF SCHOOL LEADERS

Program evaluation is a systematic process designed to gauge the quality and effectiveness of reform and the degree to which program goals and benchmarks have been met and reflect state and local academic standards. School leaders play a key role in overseeing this process and creating a shared commitment to conducting an effective and valuable evaluation process.

Guidelines for School Leaders

- ❖ Help teachers, parents, students, staff, and other stakeholders gain a common understanding of the purposes and value of evaluation.
- ❖ Know district and state requirements for evaluation.
- ❖ Set up an evaluation team to design and carry out the evaluation. Provide release time as needed for the team to do its work.
- ❖ Stress the importance of setting program goals and benchmarks that are tied to students' academic performance.
- ❖ Ensure that goals and benchmarks are specific enough to provide direction, yet general enough to allow flexibility in implementation.
- ❖ Set challenging but feasible benchmarks for all key aspects of the reform initiative. This helps ensure that the evaluation process will reveal a more complete picture of the effects of innovations.
- ❖ Promote evaluation as one aspect of continuous improvement, and dispel fears that evaluation is a way to assign blame.
- ❖ Clarify expectations about the evaluation process with teachers, parents, service providers, and other key stakeholders.
- ❖ Help create a culture of critical inquiry and improvement by asking questions about evidence of student learning.
- ❖ Encourage staff to use data by giving them time and opportunities to gather and analyze data and report findings.
- ❖ Use evaluation resources provided by the district. Seek additional resources for evaluation as needed.
- ❖ Regularly report progress to stakeholders. Keeping all stakeholders informed will help build support for the effort, particularly if incremental improvements can be demonstrated.
- ❖ Help stakeholders understand that reform is not always a smooth process and that improvements occur over time.

KEY CHALLENGE: GAINING EVALUATION EXPERTISE

One of the most important challenges in preparing for an evaluation is helping staff gain the knowledge, skills, and confidence they need to conduct the evaluation and then to use the results to guide decision making. Strengthening skills early in the process lays the foundation for a successful evaluation.

A good place to begin is assessing the skills and understanding of those who will be part of the evaluation. What expertise do staff members have? What knowledge and skills do they need to participate in the evaluation process and to interpret data appropriately?

After staff needs have been assessed, set up training opportunities that meet those needs. Some people are likely to be more versed than others in evaluation. Thus, some staff members may need general sessions on the basic elements of a successful evaluation, while others may benefit more from focused sessions on data collection and analysis.

Staff also can extend and build their capacity to conduct evaluations by seeking outside expertise from private consultants or district evaluation experts, using print resources on evaluation, and partnering with universities. Principals can help by finding resources for professional development experiences.

As staff members learn more about the evaluation process, they may become less concerned that data will be used against them. This concern often arises because people think they will be blamed for any inadequacies the process reveals. To help prevent overly negative reactions to data collection, the principal and the evaluation team should make it clear that the primary purpose of the evaluation is to improve the program, not to end it.

Where to Begin

Determine the skills and time staff will need to complete the evaluation. Allocate the necessary resources.

Establish an evaluation planning team.

Develop an evaluation plan that is as specific as possible.

Focus initial efforts on implementation questions.

Bring in an evaluation consultant during the design stage to help identify cost-effective ways to focus the evaluation.

Through careful planning, use of outside resources, and attention to skill building, schools can overcome concerns about evaluation. As a result, all stakeholders will be better informed about the effects of reform and students will have a greater chance of benefitting from them.

RESOURCES

Bernhardt, V. L. (1998). *Data analysis for comprehensive schoolwide improvement.* Larchmont, NY: Eye on Education.

Cicchinelli, L., & Barley, Z. (1999). *Evaluating for success: Comprehensive school reform: An evaluation guide for districts and schools.* Aurora, CO: Mid-continent Research for Education and Learning.

Hassel, B. (1998). *Comprehensive school reform: Making good choices: A guide for schools and districts.* Oak Brook, IL: North Central Regional Educational Laboratory.

Herman, J. L. (Ed.). (1987). *Program evaluation kit.* Newbury Park, CA: Sage.

Holcomb, E. L. (1999). *Getting excited about data: How to combine people, passion and proof.* Newbury Park, CA: Corwin Press.

Northwest Regional Educational Laboratory. (1998). *Catalog of school reform models.* Portland, OR: Author. Available: http://www.nwrel.org/scpd/natspec/catalog/index.html

Tesch, R. (1990). *Qualitative research: Analysis types and software tools.* New York: Falmer Press.

Yap, K., Douglas, I., Railsback, J., Shaughnessy, J., & Speth, T. (1999). *Evaluating whole-school reform efforts: A guide for district and school staff.* Portland, OR: Northwest Regional Educational Laboratory.

Web Sites

Connecting with other CSRD Schools
http://www.csrdweb.net

Laboratory for Student Success
http://www.temple.edu/LSS/CSR.htm

Mid-continent Research for Education and Learning (McREL)
http://www.mcrel.org/CSRD/

National Clearinghouse for Comprehensive School Reform. http://goodschools.gwu.edu

Regional Comprehensive Centers
http://www.wested.org/cc/html/ccnetwork.htm

U.S. Department of Education. Guidance on the Comprehensive School Reform Demonstration Program. http://www.ed.gov/offices/OESE/compreform/csrdgui.html

PROFESSIONAL DEVELOPMENT

Most people who hear the words "comprehensive school reform" take a deep breath because they know much work lies ahead. New, more challenging standards require much more of students, of course, but they also require much more of teachers and staff. Everyone involved in education must have an expanded ability – a greater capacity – if every student is to succeed.

For example, teachers must have the knowledge and skills to create lessons that are tied to standards and to develop standards-based assessments. They also may need to learn to use new grading methods or understand new formats for reporting students' progress by individual standard.

How can this capacity be developed? According to the National Commission on Teaching and America's Future (1996), "schools that have found ways to educate all students well have done so by providing ongoing learning for teachers and staff" (p. 9). Clearly, professional development is the key to developing the capacity needed to reach the goal of comprehensive school reform.

THE ROLE OF DISTRICT LEADERS

A healthy district climate is one that encourages teachers to learn and grow. District leaders play an important role in creating a culture that values lifelong learning, first and foremost by leading the process of developing a vision of staff learning that focuses on student outcomes. All professional development activities across the district should grow out of – and be linked to – specific student learning needs.

Characteristics of Effective Professional Development

Focuses on teachers as central to student learning, yet includes all other members of the school community

Focuses on individual, collegial, and organizational improvement

Respects and nurtures the intellectual and leadership capacity of teachers, principals, and others in the school community

Reflects best available research and practice in teaching, learning, and leadership

Enables teachers to develop further expertise in subject content, teaching strategies, uses of technologies, and other essential elements in teaching to high standards

Promotes continuous inquiry and improvement embedded in the daily life of schools

Is planned collaboratively by those who will participate in and facilitate that development

Requires substantial time and other resources

Is driven by a coherent, long-term plan

Is evaluated ultimately on the basis of its impact on teacher effectiveness and student learning; and this assessment guides subsequent professional development efforts

Source: U.S. Department of Education, 1995

Guidelines for District Leaders

- Communicate a strong and consistent message that staff development should be focused on helping students meet high standards.
- Identify professionals who can help plan, implement, and evaluate a program that meets the needs of teachers and staff.
- Create a climate of shared problem solving with school leaders. Work together to find ways to better tap into the expertise of teachers and staff, but also to identify capacities that need to be expanded.
- Give school leaders the flexibility to decide how professional development activities will be structured for their faculty and staff.
- Hold staff accountable for developing useful, relevant, and current professional development programs. Measure effectiveness and create a feedback loop that ensures ongoing improvement.
- Use ongoing evaluation of staff development activities to maintain alignment between staff development activities and reform goals.

THE ROLE OF SCHOOL LEADERS

Principals and other school leaders should take the lead in creating and sustaining a climate of learning for everyone – students, teachers, staff, and administrators. One key way they can do this is to find opportunities each day to stimulate sharing and reflection about how to better help students learn.

Guidelines for School Leaders

- Know the fundamental concepts of adult learning.
- Learn about effective models and strategies for professional development.
- Encourage teachers to take responsibility for their own learning by modeling an ongoing commitment to personal and professional growth.
- Lead the process of gathering data to identify professional development needs and to evaluate the effectiveness of professional development programs.
- Secure the necessary human, fiscal, and technological resources.
- Find time for teachers to collaborate, share ideas, and learn together (e.g., developing lesson plans and units). Participate in these activities.

KEY CHALLENGE: CREATING A CULTURE OF LEARNING

Most people associate professional development with bringing in an outside consultant to lead an in-service. But effective professional development encompasses much more. Professional development is most useful when it

is embedded in the daily life of the school – when there is a *culture of learning* in the school and district.

A culture of learning is characterized by a respect for learning, a high level of trust, collaborative processes such as shared decision making, a mutual understanding of the goal of improved student learning, and a collective commitment to the success of all students. Cultivating these shared principles happens over time as teachers purposely study together, exchange ideas, reflect on their practices, and find better ways to help students learn. Without this kind of culture, teachers will find it difficult to learn all they need to know to change their practices in ways that lead to improved student achievement.

School leaders build a culture of learning by fostering respect, trust, and strong, personal connections among staff; by being nonjudgmental and focusing on the positive; and by organizing staff into grade-level or "vertical" (cross-grade) teams to accomplish specific instructional tasks. These collaborative structures (and others, such as action research groups and study groups) help create a culture of learning by providing time for dialogue, planning, and consensus building. Principals also help develop a culture of learning by providing the resources teachers and staff need to engage in shared reading and discussion about books or articles that stimulate thinking about teaching and learning. All of these actions send the message that everyone is valued, everyone is responsible, and everyone benefits.

Where to Begin

Believe that staff have the desire to succeed.

Examine the culture of the school. Look for ways in which the culture supports or impedes effective professional development.

Gather data about student learning. Use the data to identify professional needs.

Collaborate with teachers to design a professional development program that includes a variety of ways for them to acquire the knowledge and skills they need.

RESOURCES

Bernhardt, V. (1994). *The school portfolio.* Larchmont, NY: Eye on Education.

Collins, D. (1999). *Achieving your vision of staff development.* Tallahassee, FL: South East Regional Vision for Education (SERVE).

Gonder, P. (1999). Invigorating education by reinventing staff development. In *Noteworthy perspectives on comprehensive school reform.* Aurora, CO: Mid-continent Research for Education and Learning. Available: http://www.mcrel.org/products/noteworthy/csrd.asp

Hassel, E. (1999). *Professional development: Learning from the best.* Oakbrook, IL: North Central Regional Educational Laboratory.

Loucks-Horsley, S. (1999). *Professional development that works.* Columbus, OH: Eisenhower National Clearinghouse for Mathematics and Science.

National Commission on Teaching and America's Future. (1996). *What matters most: Teaching for America's future.* Washington, DC: U.S. Government Printing Office.

National Staff Development Council. (1998). *Standards for staff development.* Oxford, OH: Author.

O'Day, J., Goertz, M., & Floden, R. (1995). *Building capacity for education reform.* CPRE Policy Briefs (RB-18-December 1995). New Brunswick, NJ: Consortium for Policy Research in Education.

Spillane, J., & Thompson, C. (1997, Summer). Reconstructing conceptions of local capacity: The local education agency's capacity for ambitious instructional reform. *Educational Evaluation and Policy Analysis, 19*(2), 185-203.

U.S. Department of Education. (1995). *Mission and principles of professional development.* Washington, DC: Author.

Zepeda, S. (1999). *Staff development: Practices that promote leadership in learning communities.* Larchmont, NY: Eye on Education.

Web Sites

National Clearinghouse for Comprehensive School Reform. http://www.goodschools.gwu.edu/
National Staff Development Council
http://www.nsdc.org

North Central Regional Education Laboratory
http://www.ncrel.org/sdrs/areas/pd0cont.htm

United States Department of Education
http://www.ed.gov/inits/teachers/teach.html

NATIONAL MODEL PROFESSIONAL DEVELOPMENT AWARD WINNERS

1996/97

Lawrence Public Schools, Lawrence, KS
Samuel W. Mason Elementary School, Roxbury, MA
San Francisco Unified School District, San Francisco, CA
Wilton Public Schools, Wilton, CT
Woodrow Wilson Elementary School, Manhattan, KS

1997/98

Ganado Intermediate School, Patagonia, AZ
Geneva City Schools, Geneva, NY
H. D. Hilley Elementary School, El Paso, TX
Hungerford School, Staten Island, NY
International High School at LaGuardia Community College, Long Island, NY
Lewisville Independent School District, Lewisville, TX
Montview Elementary School, Aurora, CO
Shallowford Falls Elementary School, Marietta, GA

1998/99

Carroll Independent School District, Southlake, TX
Edmonds School District No. 15, Lynnwood, WA
Norman Public Schools, Norman, OK
Olathe District Schools, Olathe, KS
Sprayberry High School, Marietta, GA
Spring Woods Senior High School, Houston, TX
Wherry Elementary School, Albuquerque, NM

McREL Mid-continent Research for Education and Learning
2550 S. Parker Rd., Ste. 500, Aurora, CO 80014 • phone 303.337.0990 • fax 303.337.3005 • www.mcrel.org

STAFF SUPPORT

Support from teachers and staff members is the foundation of comprehensive school reform. Without it, reform efforts have little or no chance of success, particularly over the long term.

Building support for reform is critical from the very beginning of the planning process. But it doesn't stop there. Teachers, staff members, and administrators must work together to identify needs, chart a path of reform, and navigate the sometimes choppy waters of reform. With vigilance, this sense of teamwork and shared ownership can be built and reinforced at every step of the reform process.

THE ROLE OF DISTRICT LEADERS

The success of comprehensive school reform depends on teachers and staff believing that the reform program will be well worth their efforts in terms of improved student learning. Through actions, words, and policies, district leaders can dramatically affect the degree to which everyone sees the benefits of reform.

Guidelines for District Leaders

- Promote and publicize the district's commitment to reform that truly makes a difference in student learning. Create a detailed vision of how reform will benefit students.
- Create a team of leaders in every school and across every level of the district. In addition to principals, encourage teachers and staff members to take a leadership role in school improvement.
- Use joint planning meetings and contract negotiation sessions as opportunities to build trust, an essential element of successful collaboration.
- Establish an accountability system that is built on teamwork, support, and positive reinforcement, but nonetheless communicates a clear expectation that all school staff are accountable for student success.
- Make sure everyone knows that technical support is available for every phase of reform and understands how to access help.

Ways to Build Support

Involve everyone in designing and implementing a plan for comprehensive school reform.

Make it clear that "we're in this together."

Choose an important yet attainable first goal. Implement reform in stages.

Create a climate of continuous improvement. Encourage discussion, inquiry, reflection, and sharing of ideas.

Seek out suggestions for improvement. Use these ideas to make the program stronger and stronger over time.

Provide in-house support through coaching or mentoring.

Give teachers many avenues for sharing stories of success, as well as obstacles encountered.

Celebrate accomplishments along the way, no matter how small.

- Work closely with school leaders to publicize results, reward successes, and create an environment of support and teamwork.

THE ROLE OF SCHOOL LEADERS

In order for teachers and staff members to support reform, they must recognize the need for reform, what the initiative entails, and what district and school leaders hope to accomplish. But they also must have time to think about implications, to ask questions, and to voice their beliefs and values. The more people see how the approach reflects their beliefs and values, the more likely they will be to support it. School leaders should focus on helping people make these connections and on bringing the school community together to make the most of the reform process.

Guidelines for School Leaders

- Use formal and informal meetings to give people a chance to build their understanding of needs and the plan for schoolwide improvement.
- Create a core improvement team that works together through the entire process of reform. Make sure the team represents every level and area of the school.
- After the short list of possible reform approaches has been identified, send a representative group to visit sites that are implementing those approaches. Ask the group to report back its findings and observations.
- Create frequent opportunities for people to talk about how the proposed initiative reflects the shared values of the school community and how it will enhance student learning.
- Ensure that everyone (e.g., teachers, aides, administrators, librarians, clerical staff) is clear about his or her role in the reform effort.
- Help teachers understand the instructional approaches, reporting requirements, and other changes that need to take place.
- Make sure people understand the aspects of reform they have flexibility to adapt and those that must be put in place without modification.
- Schedule time for teachers to meet in grade-level and cross-grade-level teams to talk about reform, to share ideas, and to problem solve.
- Pair teachers up as "reform buddies." Be sure to provide time for teachers to visit each other's classrooms and to talk about their progress.
- Value people's individual voices. Make it clear that even after a plan has been set in motion, it is not set in stone.

KEY CHALLENGE: CREATING EARLY SUCCESSES

By definition, comprehensive school reform involves changes in every aspect of schooling. Reform that affects every dimension of a school

– from the curriculum to school climate to school leadership – usually requires schools and districts to change their basic ways of operating. This can be an unsettling process. School leaders should be aware that failure breeds discontent, particularly if teachers are skeptical about reform in the first place.

One way to create early successes and overcome initial skepticism or resistance to the reform effort is to narrow the focus of reform for the first few months. Pick out a few key elements, and focus only on those initially. For example, if a central element of reform is launching a new reading program, consider setting a goal that in the first month teachers will learn about and try two key strategies and then meet to exchange ideas about how the strategies worked.

One reason teachers sometimes resist reform is that it often requires them to learn a great deal, which can be overwhelming. Change also suggests to most people that they will have to alter their practices, which they may view as even more work that they must squeeze into an already hectic schedule.

Thus, it's important for school leaders to build consensus around the need for change early in the reform process. Staff members need to feel a common sense of urgency – that the reform efforts are necessary. Second, school leaders need to help teachers and other staff see that they will, in fact, reap the benefits of their extra efforts. One way to do this might be to host staff members from a site that has successfully implemented the reforms that the school is undertaking and ask them to share their own success stories.

Where to Begin

Make sure everyone is "on the same page" about the need and direction for reform.

Involve everyone in the process of exploring reform options and selecting the best approach.

Give everyone responsibility for some aspect of implementing reform.

The kind of transformational change that marks comprehensive school reform depends on the support and teamwork of faculty and staff. School and district leaders who recognize the critical importance of teachers and staff have come a long way toward creating a reform effort that will be successful over the long term.

RESOURCES

Senge, P. M. (1994). *The fifth discipline fieldbook: Strategies and tools for building a learning organization.* New York: Doubleday.

Walter, K., & Hassel, B. C. (n.d.) *Guide to working with model providers.* Regional Educational Laboratory Network.

Wilber, D. M. (1999). Visionary leadership and support within the school. In *Noteworthy perspectives on comprehensive school reform.* Aurora, CO: Mid-continent Regional Educational Laboratory. Available at http://www.mcrel.org/products/noteworthy/csrd.asp

Web Sites

National Clearinghouse for Comprehensive School Reform. http://www.goodschools.gwu.edu/

U.S. Department of Education. Guidance on the Comprehensive School Reform Demonstration Program. http://www.ed.gov/offices/OESE/compreform/csrdgui.html#B1

FAMILY AND COMMUNITY INVOLVEMENT

The primary purpose of comprehensive school reform is to improve the quality of students' educational experiences so that learning is enhanced. Schools and districts are working hard to ensure that programs are coordinated, staff are trained, and the overall quality of instruction is improved. But schools must involve parents, families, and community members in meaningful ways for these efforts to realize their full potential.

Research indicates that involving parents in their children's education benefits students and schools. Student achievement increases, attendance and classroom behavior improve, and relationships between teachers and parents grow stronger. A vital partnership between parents and school staff can contribute immensely to students' success and, ultimately, to the school's success.

A family involvement program that is characterized by a series of disconnected activities will not reap many benefits. To achieve the results described above, school staff and parents must work together to create and continue to refine a thoughtful, coordinated plan that results in a richer, more productive environment for everyone. Family involvement must go beyond mere information sharing. An invitation to learn, share in decision making, and work collaboratively is a must.

THE ROLE OF DISTRICT LEADERS

District leaders create the vision and model the commitment to involving family and community members in the life of the school community. They can make this vision a reality by building personal relationships with parents, business leaders, and other community members, developing appropriate policies, and reinforcing practices that encourage participation.

Dimensions of Family and Community Involvement

The Home Environment
Help parents set up home environments that "support children as students."

Communication
Communicate with families about school programs and students' progress.

Volunteering
Recruit and organize parent and community volunteers.

Decision Making
Include parents in school decisions; develop parent leaders.

Collaborating with the Community
Tap into community resources to strengthen school programs and enhance student learning and development.

Source: Adapted from Epstein et al. (1997)

Guidelines for District Leaders

- Make it clear that involving family and community members in all schools in the district is a priority.
- Help people understand how everyone wins when parents, families, and community members are involved in schools.

- Provide the resources that schools need to strengthen ties to families and the community.
- Involve a representative group of parents, business leaders, and other community members in the work of district-level advisory and policymaking groups.

THE ROLE OF SCHOOL LEADERS

School leaders have an important role to play in involving families in the school community. They typically have more direct contact with parents than do district leaders. School leaders set the tone for family involvement in many ways, such as sending regular communications to families and complimenting teachers and staff who include parents in classroom and school activities.

A good first step is to sponsor activities that let families, teachers, and staff members get to know one another. The process of building relationships is ongoing, but "get-acquainted" activities such as home visits, back-to-school picnics, neighborhood meetings, and classroom pot lucks can go a long way toward developing a successful partnership between school staff and families. These activities help to create a school environment that welcomes parents and encourages them to ask questions and voice concerns.

Guidelines for School Leaders

- Learn how other school communities have successfully involved parents, other family members, and community members.
- Make parents feel welcomed and valued in the school, for example by immediately greeting people when they arrive; by posting an easily accessible and visible suggestion box; and by making "sign-in" notices as friendly as possible.
- Communicate frequently with parents – and community members, when appropriate – about the school's goals and ways in which they can contribute to students' learning.
- Learn about the skills and talents of family and community members. An annual survey is one way to gather this information. Volunteers are vitally important in all schools.
- Support faculty and staff members in their efforts to involve family and community members by providing needed resources.
- Work with teachers and parents to design activities that positively impact educators' perceptions and expectations of families and other community members.

KEY CHALLENGE: OVERCOMING TIME AND RESOURCE CONSTRAINTS

Many parents and community members want to be involved in their local schools, but have work, financial, and time commitments that are barriers to making good on their intentions. Responding to these needs as much as possible increases involvement and enhances relationships between the school and the community. There are many creative ways to juggle schedules, respond to needs, and provide

services that facilitate parents' involvement in school activities.

One key way to increase involvement is to ease time and cost barriers. For example, make time for parent-teacher conferences before and after school when parents drop off and pick up their children; hold meetings in neighborhood buildings; provide transportation and child care services for meetings or classes; provide food before or after meetings; and schedule art, science, or musical programs in conjunction with meetings. In addition, offer affordable before- and after-school programs that family members and students can participate in together.

Let parents know that there are many ways they can participate in the school community from home. Making phone calls, writing newsletters, preparing mailings, making classroom decorations, and hosting neighborhood get-togethers are just a few examples.

Another key vehicle for increasing involvement is communication. Set up a parent center, and create a family-community coordinator position. Publicize family-community activities in mailings and notices posted around the school; through phone calls and newspaper articles; and in grocery stores, shopping malls, and places of worship. When appropriate, be sure to communicate information in languages other than English.

Finally, identify ways in which the school can help meet the needs of families in the school community. For example, evening or weekend sessions about health and nutrition, learning disabilities, parenting, available social services, English as a second language, and earning a GED can be valuable topics for family and community members alike.

Where to Begin

Put together a team to develop an action plan for increasing or improving family and community involvement.

Conduct a needs assessment to identify family needs and areas that might be targeted by the partnership.

Schedule activities that let staff, parents, and community members get to know one another.

Develop a written policy that clarifies the school's philosophy and commitment to involving families and other community members.

Secure support from school board members, district leaders, parents, community and business leaders, and social service agencies.

RESOURCES

Comprehensive Regional Assistance Center Consortium - Region VI, University of Wisconsin-Madison. (1998, fall). Parents and schools working together. *CC-VI Forum, 3*(3). Madison, WI: Author.

Epstein, J. L., Coates, L., Salinas, K. C., Sanders, M. G., & Simon, B. S. (1997). *School, family, and community partnerships: Your handbook for action.* Thousand Oaks, CA: Corwin Press.

National Education Goals Panel. (1995). *Executive summary: Improving education through family-school-community partnerships.* Washington, DC: Author.

National Parent-Teacher Association. (1997). *National parent and family involvement program standards.* Chicago, IL: Author.

Shartrand, A. M. (1997). *New skills for new schools: Preparing teachers in family involvement.* Cambridge, MA: Harvard Graduate School of Education.

U.S. Department of Education. (1996). *Putting the pieces together: Comprehensive school-linked strategies for children and families.* Washington, DC: Author.

U.S. Department of Education. (1997). *Family involvement in children's education: Successful local approaches.* Washington, DC: Author.

Web Sites

Children First:
The Web site of the National PTA
http://www.pta.org/index.stm

Education Week on the Web:
Parent Involvement
http://www.edweek.org/context/topics/parent.htm

Family Education Network
http://familyeducation.com/

Family Involvement in Children's Education:
Successful Local Approaches
http://www.ed.gov/pubs/FamInvolve

National Clearinghouse for Comprehensive School Reform. http://www.goodschools.gwu.edu/

National Coalition for
Parent Involvement in Education (NCPIE)
http://www.ncpie.org

National Parent Information Network (NPIN)
http://www.npin.org

Partnership for Family Involvement in Education
http://www.ed.gov/PFIE/index.html

Strong Families, Strong Schools
http://eric-web.tc.columbia.edu/families/strong

U.S. Department of Education. Guidance on the Comprehensive School Reform Demonstration Program. http://www.ed.gov/offices/OESE/compreform/csrdgui.html#B1

EXTERNAL SUPPORT AND ASSISTANCE

Anyone involved in comprehensive school reform knows that it is not an easy task. Assistance from an experienced outside agency can sometimes provide the inspiration and information people need as they "muster the will and the skill" to change (Miles & Louis, 1990).

Technical assistance can take many forms and occur at various stages of the reform process. It may involve using research to design the reform program, solving implementation problems, providing staff training, assessing progress, and making recommendations for program improvement.

Regardless of the source of the external assistance (e.g., model developer, university, regional educational laboratory, private agency), the district or school must develop an effective relationship with the provider. Productive partnerships result when there is a shared, clear understanding about responsibilities, goals, and a plan of action. This clarity must be matched with a commitment to open and ongoing communication, including feedback about how the work and the partnership are progressing from the perspectives of everyone involved.

THE ROLE OF DISTRICT LEADERS

Comprehensive school reform is more likely to succeed if there is support at all levels of the education system. Although district leaders may not be involved with model developers or technical assistance providers to the extent that school staff will be, their involvement is especially critical in the early stages of the relationship as roles, responsibilities, and expectations are clarified. District leaders also have a role to play in maintaining these relationships throughout the duration of the partnership.

Key Questions to Ask Assistance Providers

What types of services are available?

To what extent can services be tailored to the school's needs?

How are the people who will work with the school chosen? What are their qualifications?

How is feedback provided? What happens if the school is not satisfied with the assistance?

Does the assistance include professional development for school leaders?

What skills will be taught and what topics will be covered in the professional development activities offered?

To what extent do materials and professional development activities address the needs of diverse learners?

Guidelines for District Leaders

- ❖ Create a resource bank of qualified providers.
- ❖ Be clear about district goals and the extent to which provider services can be tailored to help meet them.

- Consider how the services provided will address the public's expectations.
- Give school leaders the decision-making authority they need to work effectively with the assistance provider.
- Determine the total cost of obtaining outside technical assistance. Be sure to consider the direct cost of services as well as indirect costs such as substitute teachers, equipment, travel, materials, and stipends.
- Allocate the financial and human resources needed to ensure that the partnership will be productive.
- Modify district policies, if necessary, to support the work of the partnership.
- Be clear about the district's constraints for payment (e.g., how often and when).
- Develop a plan for continually monitoring the assistance. Provide feedback to the service provider on a regular basis. Ask how the provider's work will be evaluated.

THE ROLE OF SCHOOL LEADERS

School leaders should develop a strong relationship with technical assistance providers since school staff will work directly with the providers or be most directly affected by the work. Developing this relationship helps external providers feel more connected to the school community.

Guidelines for School Leaders

- Become thoroughly familiar with the capabilities of the external assistance provider, the school's needs, and the staff's needs and abilities.
- If the district has not already done so, check that the provider has a well-trained staff, quality materials, a plan for monitoring the work, and evidence that the assistance is based on best practices.
- Collaborate with the external assistance provider to develop a plan for working together. Clearly describe expectations for both partners.
- Allocate and schedule the time and resources necessary to work with the assistance provider.
- Encourage teachers and staff members to participate in external assistance activities.
- Communicate frequently with the assistance provider, with teachers, and with staff members about progress toward agreed-upon goals (e.g., teacher learning, higher student achievement).
- Establish and support a leadership team to work with the assistance provider on an ongoing basis.
- Provide opportunities for staff members to share concerns and to celebrate progress with the assistance provider.
- Encourage teachers and staff members to apply the advice and expertise they have gained.
- Look for evidence that the provider's advice and expertise are being applied in the classroom. Help teachers understand the need to assess whether outside assistance is helping them improve student learning.

KEY CHALLENGE: REACHING AN UNDERSTANDING ABOUT ROLES & RESPONSIBILITIES

A key challenge in working with external assistance providers is reaching a shared understanding about the type and extent of services to be provided. An important first step is to learn as much as possible about the provider's services. Talk with previous clients, read information offered by the provider, and ask direct questions about services the school may purchase. Enter the partnership with a realistic picture of how the provider can help the school reach its goals.

To help teachers and staff members understand the kind of assistance that is available, schedule question-and-answer sessions during staff or team meetings. Questions that arise can be shared with the whole staff via e-mail or memos. Distributing fact sheets at meetings might also be helpful.

Another way to build shared understanding is to publicly display the agreements that have been reached about services. For example, write memos, articles for the school newsletter, or reports for a partnership bulletin board.

Even after an agreement has been reached, it is important to emphasize the school's goals in all conversations with the assistance provider. Being clear about expectations, knowing the right questions to ask, and communicating frequently about progress will increase the chances that the work of the partnership will be fruitful.

Where to Begin

Identify potential technical assistance providers.

Select two or three that appear to offer the services needed.

Interview these providers. Speak with previous clients if possible.

Prepare a summary of program and service needs. Clarify goals and desired outcomes.

Schedule an initial meeting to discuss goals, needed services, and parameters for working together.

RESOURCES

Miles, M., & Louis, K. S. (1990, May). Mustering the will and skill for change. *Educational Leadership, 47*(8), 57-61.

New American Schools. (1999). *New American Schools' standards of quality for design-based assistance.* Arlington, VA: Author.

Turnbull, B. J. (1996). *Technical assistance and the creation of educational knowledge. (*A paper commissioned for the Office of Educational Research and Improvement). Washington, DC: U.S. Department of Education.

U.S. Department of Education. (1999a). *Guide to working with model developers.* Washington, DC: Author.

U.S. Department of Education. (1999b). *CSRD in the field: Fall 1999 update.* Washington, DC: Author.

Web Sites

National Clearinghouse for Comprehensive School Reform. http://www.goodschools.gwu.edu/

U.S. Department of Education. Guidance on the Comprehensive School Reform Demonstration Program. http://www.ed.gov/offices/OESE/compreform/csrdgui.html

About this Series

Dear Reader,

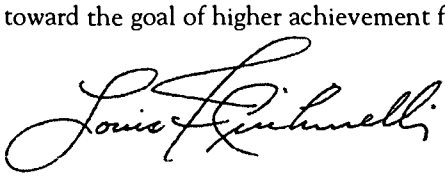
Initiating change is not easy, but sustaining the improvements that result from change is even harder. This is true primarily because of the number of factors that affect sustainability and the complex and unexpected ways in which they interact. Managing this complexity requires that school leaders have a clear understanding of what sustaining improvement involves. *Leadership Folio Series: Sustaining School Improvement* is intended to help school leadership teams — teachers, administrators, and other school leaders — deal with this complexity by explaining what it means to sustain improvement and by providing guidelines for addressing the factors that affect the ability to do so.

This series augments McREL's first folio series, *Leadership Folio Series: Guiding Comprehensive School Reform*, which dealt with designing and implementing comprehensive school reform programs. That series, which was targeted toward principals and superintendents, addressed such topics as adopting research-based innovations, ensuring that a program of reform is comprehensive, establishing guidelines for resource allocation, the importance of ongoing evaluation, the elements of a successful professional development program, the key role of staff support, the benefits of involving family and community members in change, and how and when to engage external support and assistance. These topics reflected the components required under the federally funded Comprehensive School Reform Demonstration Project, then in place. The guidance provided in that series also is certainly applicable to comprehensive school reforms in general.

Continuing that thread, McREL's newest folio series provides guidance for school leadership teams to help them meet the challenge of sustaining the progress made under Comprehensive School Reform. This series is based on the assumption that a comprehensive program is in place, that there is interest in sustaining the improvements accomplished under reform, and that leadership is shared in a number of ways, in particular through a school leadership team that includes teachers and administrators.

In this series, sustaining improvement means adapting and improving programs and practices in response to contextual changes that occur over time — in other words, enduring by evolving. Collectively, the strategies offered in this series are intended to help you stay focused on the most important levers for sustaining school improvement. In recognition of the importance of culture, one of the folios in this series focuses on maintaining an active professional learning community. This folio describes the culture of a school in which staff are guided by a shared vision, work collaboratively, and learn together to improve their effectiveness for the benefit of students. It is the task of this community to plan, implement, and sustain reform through effective data-driven decision making, professional development, resource allocation, and communication — the topics of the remaining folios.

The guidance provided in these folios is built on literature that addresses change theory and processes. In general, this literature base is not characterized by rigorous research studies but, rather, by the experiences and professional wisdom reported by those engaged in change and school reform. Each folio describes the key elements of the topic and offers guidance to school leadership teams in using this dimension to sustain improvement. Each folio also includes a continuum that describes various stages of progress toward sustaining improvement to help schools understand the actions they may need to take. In addition, to bring the ideas to life, a concrete example of how a school has sustained improvement by addressing one or more elements of the topic is included in each folio. It is our hope that the information in this folio series helps school leadership teams sustain and enhance progress toward the goal of higher achievement for all students.



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Professional Learning Community

"All for one and one for all" was a grand rallying cry for the Three Musketeers. Likewise, teachers and other staff members must work together toward the common goal of improved student achievement. When everyone works collectively to seek and share learning and act on that learning to improve their effectiveness as professionals so that students benefit, they are functioning as a professional learning community (Hord, 1997). This collective focus and collaboration leads to well-coordinated activities and practices and a sense of connection, belonging, and support (Fullan, 1999). As a result, there is more capacity for sustaining improvements and the core values and beliefs behind them.

Key Elements

Schools that function successfully as professional learning communities are able to readily acclimate and respond to new policies and other changes. In a professional learning community, teachers and administrators (1) share a vision focused on student learning, (2) share leadership and decision making, and (3) work and learn together as they continually examine instructional practices — all of which are supported by strong personal and professional relationships, time for collaboration, and good communication.

Shared Vision

In a school that is sustaining improvement, an effective vision is more than a collection of statements on paper — it paints a picture of what the school hopes to become. In a professional learning community, teachers, administrators, and others "commit to" rather than "buy into" the vision because it was developed by them rather than by only the principal or a small group. Effective schools use the vision as a context for decision making about instructional practice and collaborative learning efforts and as a guide for carrying out their work. They monitor how members interact with students, teach and assess, and allocate resources to make certain that the vision continues to reflect the school's common values and goals for improvement. In addition, they periodically review the vision to determine if the standards it sets forth are ambitious yet attainable and if it continues to focus closely on the diverse needs of students served by the school (Eaker, DuFour, & Burnette, 2002).

Shared Leadership and Decision Making

In a professional learning community, administrators are committed to sharing decision making with staff and providing opportunities for teachers to serve as leaders. For example, teachers may lead decision-making efforts related to goals, staff development, curriculum and instructional materials, budgets, personnel, and the implementation and monitoring of improvement strategies (Quellmalz, Shields, & Knapp, 1995). Collective decision making results in increased morale, ownership, understanding about the direction and processes of change, shared responsibility for student learning, and a sense of professionalism, all of which help to sustain improvement efforts.

> The dynamic interaction of shared practice and collective inquiry is perhaps the most essential aspect of a professional learning community.

Shared Practice and Collective Inquiry

The dynamic interaction of shared practice and collective inquiry is perhaps the most essential aspect of a professional learning community. This critical ingredient involves teachers using the same practices and opening individual teaching practices to scrutiny through activities such as peer coaching. It also involves teachers continually evaluating the effectiveness of their teaching strategies in light of new programs and practices and the needs, interests, and skills of their students (Northeast and Islands Regional Educational Laboratory, 2000). Their inquiry efforts are guided by the school vision and improvement plan and a desire to expand their expertise.

Shared practice and collective inquiry help sustain improvement by strengthening connections among teachers, stimulating discussion about professional practice, and helping teachers to build on one another's expertise. Ongoing questioning and investigation of practice help staff members stay well informed and develop a body of knowledge that can be used to improve student learning. Teachers and administrators maintain a culture of ongoing inquiry in a variety of ways — by participating in study groups, pilot-testing new programs, sharing insights gained from workshops or conferences, and joining professional associations (U.S. Department of Education, 1995).

Shared practice and collective inquiry help sustain improvement by strengthening connections among teachers, stimulating discussion about professional practice, and helping teachers to build on one another's expertise.

The success of a professional learning community depends on supportive relationships that have room for honest discussion and examination of professional practices. Supportive relationships flourish in an environment that builds trust by strengthening connections through a variety of social and professional activities — from the faculty picnic to dialogue sessions on books. In combination, these activities create a foundation that sustains improvement over the hills and valleys of change.

In schools that successfully sustain improvement, time, teams, and other school structures support shared practice and inquiry. For example, classes are scheduled to create common planning periods, particular school days are extended to bank time for professional learning, formal opportunities are available for teachers to observe and provide feedback to one another, and teams coordinate activities such as science fairs or service learning projects. A variety of communication structures (e.g., meetings to discuss problem areas and new ideas, school-wide announcements and distribution of information) are used to keep everyone informed and involved. Even the physical arrangement of the school — for example, where teachers' classrooms are in relation to one another — is maximized to reduce isolation and increase teacher interaction (Hord, 1997).

What the School Leadership Team Can Do

One of the main roles of the school leadership team is to support the collaborative, coordinated efforts to improve student learning that are key in a professional learning community. For example, the team should monitor how well formal collaborative structures — teacher pairings for observation, coaching, and mentoring; grade-level or cross-grade teams; regular planning and problem-solving meetings; and committees and leadership councils — are working. The team should ask to what extent these structures help teachers exchange feedback about instructional practices and if they focus on positively affecting student outcomes (Eaker et al., 2002). The team should also ensure that hiring and induction processes help new employees become part of the school's collaborative culture.

Another primary role for the school leadership team is to monitor whether daily practices and behaviors align with the goals and objectives established in the vision. They might determine, for example, whether teachers are investigating and implementing new research-based programs or engaging in professional development activities that support student learning. They might seek evidence that the vision is guiding decision making around instructional practices that affect student learning. The leadership team also can ensure that the vision continues to play its focusing role by referencing it during meetings and other school events, and making a point to consistently celebrate successes that move the school closer to realizing the vision (Eaker et al., 2002). These efforts, and others, will help ensure the all-important alignment of programs and practices with the school vision.

The school leadership team should support the learning community in other ways as well. For example, team members might take the lead in staying up-to-date with professional organizations and other groups that offer relevant, useful instructional materials. They might evaluate current partnerships, identify potential new partnerships, and steer individuals with grant-writing abilities toward potential funding sources. The leadership team also should monitor collaborative efforts to ensure that faculty members have appropriate access to information and resources to carry out leadership or team responsibilities.

What Does the Professional Learning Community Look Like in Our School?

The following continuum of sustainability strategies can be used to assess the adequacy of the learning community in your building. Schools that take the actions described in the right-hand column are more likely to sustain improvement.

Least Effective	Somewhat Effective	Most Effective
Shared Vision		
Only a few people are familiar with the vision because it was developed primarily by the principal or a small group. The vision includes high expectations for all students, but it may not be clear enough to guide day-to-day work and interactions.	Everyone is familiar with the vision because it was developed based on input and feedback from a wide range of individuals. The vision is clear and specific and includes high expectations for all students. It guides day-to-day work and interactions.	Everyone is familiar with and committed to the vision because they were involved in developing it. The vision reflects high standards for all students and guides all decisions that affect teaching practices and goals for student learning. Teachers, administrators, and others regularly revisit the vision and values behind it.
Shared Leadership & Decision Making		
The principal values teacher input but bears final responsibility for most decisions. Some teachers serve in leadership roles but are not involved in decisions that affect the whole school. There are limited resources and few structures to support teachers' involvement in decision making.	The principal provides opportunities and resources to support teachers' involvement in some schoolwide decision-making processes, but teachers may not have adequate access to the information or resources they need to carry out decision-making responsibilities. Leadership councils and other structures that facilitate decision making are in place, but they may not be effective.	Most teachers act as leaders in some area and are routinely involved in schoolwide decision-making processes. Leadership councils and other structures that facilitate decision making are in place. Teachers have appropriate access to the information and resources needed to carry out decision-making responsibilities.
Shared Practice and Collective Inquiry		
There is little or no communication among teachers about their instructional experiences. Social relationships support shared practice, but physical structures may not (e.g., time for teachers to plan and learn together is an add-on to the school schedule).	There are structured opportunities for teachers to share their instructional practices and learn about new ones (e.g., observation and discussion of classroom practices). Social relationships and physical structures provide support for shared practice (e.g., time for teachers to plan and learn together is built into the school schedule).	There are informal and formal ways for teachers to provide one another with feedback regarding observed instructional practices. Social relationships and physical structures (e.g., time) maximize opportunities for interaction, collaboration, and learning.

From the Field

Lewis and Clark Middle School
Jefferson City, Missouri

Becoming a professional learning community is what Lewis and Clark Middle School is all about — not as an end in itself, but as a way of increasing student learning. For nearly 10 years, Lewis and Clark teachers have worked collaboratively to boost their repertoire of instructional strategies to engage students in learning and increase their performance.

After analyzing data from an audit of classroom instructional practices conducted by a visiting team from the University of Missouri, teachers realized that the level of "active teaching and learning" in classrooms was lower than they expected. As a result, in the fall of 2000, the School Reform Committee implemented a system of Professional Development Strands to address the issue of student engagement. Each strand incorporates instructional content or methodology designed to increase student engagement and, ultimately, student achievement. The study groups for specific strands focus on different themes: creating classrooms that make good use of the latest brain research; differentiating the curriculum in a way that challenges all students; and better meeting the needs of at-risk students. Participants in each strand meet with a teacher-facilitator throughout the school year, sometimes over several years, to gain expertise and learn best practices. Teachers also have the option to join other study groups.

The staff subscribes to the Japanese concept of Kaizen, which translates as "better way." This means the staff is committed to continuous improvement. For example, Lewis and Clark staff members conduct classroom observations to assess the progress of school-wide efforts. Since implementing the Professional Development Strands, student disengagement has decreased and teacher-led instruction has increased. (See table.) State test data also bear out the program's success: from 1992–2002, student performance increased significantly. For example, students scoring in the upper two quintiles on the science test rose from 13 to 23 percent; those scoring in the lower two quintiles fell from 59 to 46 percent.

Changes in Student Disengagement & Teacher-Led Instruction

	2000	2002
Student disengagement in core areas	8%	0%
Student disengagement in exploratory areas	29%	7%
Teacher-led instruction — core classes	35%	48%
Teacher-led instruction — exploratory classes	21%	25%

These results reflect the commitment of the Lewis and Clark staff to the elements that make up a successful professional learning community. High expectations are met with equally high levels of support, and staff members share a commitment to improving student achievement. Many have taken notice: visitors to the school often comment on the high degree of collegiality they observe — most certainly a reflection of the school's strong professional learning community.

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References

Eaker, R., DuFour, R., & Burnette, R. (2002). *Getting started: Reculturing schools to become professional learning communities.* Bloomington, IN: National Educational Service.

Fullan, M. (1999). *Change forces: The sequel.* Philadelphia: Falmer Press.

Hord, S. M. (1997). Professional learning communities: What are they and why are they important? *Issues...about Change*, 6(1). Austin, TX: Southwest Educational Development Laboratory. Retrieved from www.sedl.org

Northeast and Islands Regional Educational Laboratory (LAB at Brown University). (2000). *What it takes: 10 capacities for initiating and sustaining school improvement.* Providence, RI: Brown University.

Quellmalz, E., Shields, P. M., & Knapp, M. S. (1995). *School-based reform: Lessons from a national study: A guide for school reform teams.* Washington, DC: U.S. Department of Education. Retrieved from www.ed.gov/pubs/Reform/title.html

Data-Driven Decision Making

Using data to make decisions about policies, programs, and individual students is a hallmark of schools that want to stay on the path of continuous improvement. These schools have incorporated thoughtful data collection, analysis, and use into their improvement plans. Teachers and administrators in these schools know how to use the feedback provided to pinpoint areas in need of improvement, get to the root cause of problems, guide resource allocation, and communicate with stakeholders as needed. Educators in schools that sustain improvement know that gut feelings, instincts, and anecdotes are poor substitutes for empirical data when important decisions need to be made.

Key Elements

Although the exact nature of data collection, analysis, and use may vary from school to school, the key elements of an effective data program include (1) purposeful data collection and analysis; (2) designated resources and other supports, such as time and an appropriate data management system; and (3) strategies for communicating about the process of data collection and use as well as the findings. Each of these elements is discussed in the sections that follow.

Purposeful Data Collection and Analysis

When data collection and analysis are purposeful, educators are better able to identify patterns of outcomes and design strategies to enhance student learning. Purposeful data collection and analysis efforts focus on answering questions that are tied to identified needs and goals, as illustrated in the sidebar. Focusing on identified needs and goals — in the school improvement plan, for example — makes the best use of time and other resources. It also increases the likelihood that teachers will use data to inform decision making and that stakeholders will receive useful information about the school.

Tying Data Collection to Needs and Goals

Identified Need: Improvement in mathematics problem solving in the elementary grades

Goal: By May 2004, 85% of 4th-grade students in each subgroup will perform at proficient levels in mathematics problem solving as measured by the district math assessment.

Question: How effective is the after-school math tutoring program for English Language Learners?

Ensuring that data efforts are purposeful doesn't mean limiting the types of data collected. In fact, schools that focus their data collection processes are likely to collect many types of data from a variety of sources to answer complex questions, such as those in the sidebar. Considering different types of data — for example, demographic, student outcome, perception, and school process data — both alone and in combination over time helps create a more complete view of student achievement. For example, considering scores on state tests may help determine how students are doing overall, but examining students' performance on classroom assessments may reveal how well students are learning particular topics or skills.

In-Depth Data Analysis: Sample Questions

- Which form of block scheduling has made the biggest difference for at-risk students over the last three years, and is there any group of students that has responded better to block scheduling?
- Have scores on the district's reading assessment been consistent with report card grades over the past three years?

Purposeful data analysis focuses on using data to make decisions about programs and students. To make appropriate decisions about *programs*, data may need to be analyzed over multiple years; to make appropriate decisions about *students*, data may need to be disaggregated, analyzed across classes and teachers, and draw on more than one source (Bernhardt, 1998). For example, to understand how different groups of students are performing in the mathematics curriculum, a school might collect data on student demographics, teaching practices, student learning (e.g., performance on state, district, and classroom assessments) and particulars about the program (e.g., textbooks in use, teacher experience with the curriculum) and analyze these data over

a three-year period. By going beyond simple data analysis (examining one year's results on a single test) to in-depth analysis (examining the interaction of multiple types of data from varied sources over multiple years), educators can determine the effects of their programs and practices and modify them to improve student performance.

Resources and Supports

In order for data to be collected and used effectively to enhance student learning, a number of supports need to be in place. One important support is a data team. Working as a team builds a sense of community that provides support for improvement over the long run. Also, distributing the work across team members lightens the burden on any one person and ensures that if a member leaves, the team continues to function. In addition, a team is likely to view data from multiple perspectives, which increases the probability that interpretation of data will be less biased and more complete.

Another necessary support for effective data-driven decision making is access to the right tools — data collection and analysis software, access to the Internet and e-mail, and access to practical guides and references. A technology infrastructure, including professional development for users and equipment maintenance, supports the sustainability of improvements by aiding data use over the long term.

Time is one of the most critical supports staff members need in order to use data for decision making. Schools and districts that sustain improvement efforts know the importance of involving staff members with data at critical points and have found ways to provide time for their involvement (Holcomb, 1999). Some activities, such as affirming the school improvement plan, can be embedded in staff meetings. Other activities, such as identifying appropriate improvement strategies, require more time and often occur during scheduled in-service days or "early-release" afternoons. Because the data team has the primary responsibility for coordinating data collection, analysis, interpretation, and reporting, monthly meetings are necessary. Some schools create time for these meetings by providing substitute teachers for team members or by holding meetings after school and compensating members for their time. Other schools arrange team members' schedules so that activities occur in part during the school day and in part after school hours.

In the world of schooling, it's impossible to talk about time without talking about money. Schools that know the data-based requirements of their various funding sources (e.g., needs assessment, evaluation) can legitimately use funds from those sources to support the work of the data team.

Communication

Communicating both the purpose and results of data analysis to all stakeholders is critical for schools that want to sustain improvement efforts. This communication must occur throughout the school year, not just when the school or district's annual report card is released. Further, schools should think carefully about whether information should be disseminated without conversation or whether opportunities also should be available to talk about results, patterns, possible interpretations, and likely next steps. Allowing time for stakeholders to dialogue about the results of data analysis is worth the effort because it leads to sounder strategies and policies and greater understanding and support at all levels (Love, 2002).

> The primary role of the school leadership team in data-driven decision making is to help maintain a respectful, trusting culture in which data can be collected, analyzed, and used constructively to increase student achievement.

What the School Leadership Team Can Do

Given the complexity of collecting and using data for decision making, it is best that the school leadership team not serve as the data team. Nonetheless, at least one member of the leadership team should serve as a liaison to the data team to facilitate communication and collaboration between the groups (Johnson, 2002).

The primary role of the school leadership team in data-driven decision making is to help maintain a respectful, trusting culture in which data can be

collected, analyzed, and used constructively to increase student achievement. To carry out this role, the team can ensure that there are regular opportunities to discuss not only the data and their implications, but also assumptions being made about students and the personal beliefs that can affect how data are interpreted. Maintaining a climate of trust and respect helps ensure that potentially difficult or sensitive discussions about data and resulting decisions are productive (Love, 2002).

Part of maintaining a culture that supports the use of data is ensuring that data are continually reviewed. The leadership team can do this by posing key questions to the data team (e.g., Do these data give us the information we need? What data are missing, and how can we find or collect missing information?), encouraging them to expand the types of data collected, and providing the guidance and support they need to deepen their analysis. School leaders also should continually revisit how resources for data collection, analysis, and use are allocated and make adjustments as needed (Johnson, 2002). For example, to ensure that data are used for decision making over the long term, the leadership team should periodically review the technological capacity of the system for data storage and analysis. In addition to considering technological capacity, the leadership team needs to ensure that data team members receive ongoing professional development to increase their capacity to analyze complex school data (Mason, 2001). By allocating resources to all aspects of the data system, the leadership team sends the message that data-driven decision making is integral to the life of the school's mission and a key part of continuous reflection and self-improvement.

What Does Data-Driven Decision Making Look Like in Our School?

The following continuum of sustainability strategies can be used to assess the adequacy of the data-driven decision-making process in your building. Schools that take the actions described in the right-hand column are more likely to sustain improvement.

Least Effective	Somewhat Effective	Most Effective
Purposeful Data Collection and Analysis		
Data collection is not aligned with identified needs and goals. Different types of data may be collected, but the focus of data collection is primarily on student outcomes. Data analysis focuses on measures of student achievement over time. Achievement data are disaggregated.	Data collection is aligned with identified needs and goals. Data collection includes several forms of student outcome data but limited amounts of data. Multiple measures of student achievement data are disaggregated and analyzed over time. Different types of data may also be examined but not in combination with other types of data.	The purposes for data collection are clearly stated, and data collection is aligned with identified needs and goals. Appropriate amounts and types of data are collected. Different types of data from a variety of sources, including disaggregated data, are examined over time, alone and in combination.
Resources and Supports		
A data team may be in place, but it is viewed as an ad hoc group rather than a standing committee. Some technology may be available to support the team's work, but no training is provided.	A data team exists and meets on a regular basis. Time is provided for the team to meet. Limited training and technology to support data collection and analysis are available.	Data structures and processes are in place, including a data team, adequate time, appropriate technology, and training. These structures are viewed as permanent, revisited regularly, and revised as necessary.
Communication		
Communications about data are sporadic and intended only as "information dissemination," not for the purpose of discussion and improvement.	Communications about data occur on a regular but limited basis. Communications are mainly for providing information, but there are some opportunities for stakeholders to participate in discussions about data.	There are clear communications about all aspects of data collection, analysis, and use. Communications about data occur on a regular and timely basis. Communications include discussions that provide opportunities for stakeholders to participate in the decision-making process.

From the Field

Jeanette Myhre Elementary School
Bismarck, North Dakota

In 1994, Bill Demaree, principal of Jeanette Myhre Elementary School, and his Schoolwide Planning team searched high and low to find data that could help them formulate their first Title I Schoolwide Improvement Plan. Although data from statewide testing in grades three through six were available, the school did not have access to the specific classroom-level data necessary to impact student achievement. Recognizing the critical role of data in instructional decision making, the staff of Jeanette Myhre Elementary School set about crafting a comprehensive data program. Educators at the school now have access to a full range of data-collection and data-analysis tools.

To date, the Planning Team, now made up of the chairpersons of several curriculum study committees, has used data in a number of ways to determine how best to target services to a diverse group of children. For example, data have been used to validate the effectiveness of the summer school program and to determine the merits of students "looping" with teachers. This stronger emphasis on data collection also has led to the realization that teachers did not have access to consistent, classroom-level data about students' mathematics progress. As a result, the school partnered with its regional educational laboratory, Mid-continent Research for Education and Learning (McREL), to align its mathematics curriculum with state standards. Perhaps most important, the data are used to gauge the success of programs by measuring growth in student achievement.

"Data demonstrate the need — and you can't refute it," says Demaree. "It helps get people on board when they see the evidence in black and white. And teachers enjoy seeing the results of their work reflected in data on student achievement. It validates that what they're doing makes a difference."

Because data can be gleaned from a number of sources, this information has wide applicability across school programs and departments. For instance, as part of continuing school improvement efforts, the Schoolwide Planning Team has established a new initiative called the "sustainability plan." As part of the initiative, teachers have devised ways to ensure the continuation of the innovations that have substantially increased student learning. For example, two hours of weekly block time have been built in for planning. Several teachers have assumed coaching roles and now lead their colleagues in learning new strategies to enhance students' learning in mathematics, reading, and writing. The continued use of data is a cornerstone of the sustainability plan — and is now a part of the everyday fabric of teaching and learning at Jeanette Myhre Elementary School.

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References

Bernhardt, V. (1998). *Data analysis for comprehensive schoolwide improvement*. Larchmont, NY: Eye on Education.

Holcomb, E. (1999). *Getting excited about data: How to combine people, passion, and proof*. Thousand Oaks, CA: Corwin Press.

Johnson, R. S. (2002). *Using data to close the achievement gap: How to measure equity in our schools*. Thousand Oaks, CA: Corwin Press.

Love, N. (2002). *Using data/getting results: A practical guide for school improvement in mathematics and science*. Norwood, MA: Christopher-Gordon.

Mason, S. A. (2001, Spring). Turning data into knowledge: Lessons from six Milwaukee public schools. *CC-VI Forum*, 6(1), 3–6. Madison, WI: Author. Retrieved from www.wcer.wisc.edu/ccvi/pubs/publication/archive/newsletter/ccviSPR2001_Final.pdf

Professional Development

Making sure that professional development is both "professional" and "development" is no small task. But schools that want to sustain improvements know that paying attention to learning for teachers and administrators is key to success. For long-term accomplishment of the school's goals, teachers and administrators can't learn what they need to know by attending a few one-shot workshops or by learning in isolation from their colleagues. Rather, their learning must be collaborative and connected to the goals and daily work of the school. In other words, professional development must be well planned, comprehensive, and connected to the school's priorities.

Key Elements

There is increasing agreement about the characteristics of effective professional development programs. These characteristics have been identified in various documents, including a 1995 U.S. Department of Education publication outlining the principles of professional development and a 2001 National Staff Development Council publication outlining standards for staff development.

In this section, three key elements of effective professional development programs are described; these elements capture the characteristics of these programs that are critical for sustaining improvement. First, professional development programs that contribute to sustained improvement are relevant to ongoing improvement initiatives. Second, they are long term and integrated into daily practice. Finally, they provide teachers with targeted, timely feedback about their use of the knowledge and skills acquired through professional development.

Relevant

Simply put, a professional development program that is relevant ensures that learning activities address the school's unique goals and needs and the various skill levels and learning preferences of participants. This means that the professional development program addresses content knowledge as well as pedagogical skills and provides options for learning — from conferences and workshops to coaching and action research. To sustain improvement, a professional development program must include a review of information about students' progress and improvements in teachers' knowledge and skills. Monitoring the impact of a professional development program on student and staff learning can help ensure that the program continues to be relevant.

Monitoring the impact of a professional development program on student and staff learning can help ensure that the program continues to be relevant.

Long Term and Integrated Into Daily Practice

Teachers, like students, learn best when they have sufficient opportunities to acquire and integrate new ideas and put new skills into practice. Thus, staff development must be a long-term, ongoing process.

For professional development experiences to contribute to sustained school improvement, they should be designed as a sequence of activities that work together as a coherent whole (Garet, Birman, Porter, Desimone, & Herman, 1999; Lauer, 2001). For example, a school interested in improving the mathematics performance of its students might provide teachers with an opportunity to attend a summer institute offered by the district or by a mathematics organization such as the National Council of Teachers of Mathematics. During the following school year, an instructional resource teacher could provide coaching for the teachers, conduct demonstration lessons, or facilitate study groups. The teachers who attended the institute might meet on a biweekly basis to share samples of student work and to discuss how they are implementing strategies learned during the summer. They also might form a study group to discuss readings related to the topic of the institute. Periodically throughout the year, they should reflect as a group on how their teaching practices have changed and the effects of those changes on student learning. For professional development to sustain improvements, it must be purposeful, and the connections among activities and the reasons behind them must be clear to everyone.

The kind of professional development that sustains improvement requires a substantial investment of time and other supports (Sparks, 2002). Time for professional development should be set aside, either by reorganizing the school day or by revising the school calendar to provide early- or late-release days when students are out of school or participating in activities outside the classroom (U.S. Department of Education, 1996). Other supports for professional development might include a committee to plan activities and monitor results and teams in which teachers can learn together. The expectation that teachers participate in professional development and use what they learn as a result of those experiences is another less tangible form of support that makes it possible for professional development to sustain improvement.

Of course, it takes money to put the necessary supports for high-quality professional development in place. Successful schools know how to use their resources wisely for this purpose. They coordinate a variety of funding sources and earmark funds for professional development.

The expectation that teachers participate in professional development and use what they learn as a result of those experiences is another less tangible form of support that makes it possible for professional development to sustain improvement.

Provides Feedback

Like students, teachers need specific and timely feedback about their progress in using the knowledge and skills learned during professional development (Alseike, 1997). This feedback is particularly effective when it is provided through collaborative activities such as peer coaching sessions, team teaching, action research study groups, or formal processes for looking at student work and performance data (e.g., lesson study or critical friends groups). These methods of feedback help sustain improvement because they improve individual teacher practice and result in increased teamwork and collaboration.

What the School Leadership Team Can Do

The school leadership team can do much to ensure that available learning opportunities for teachers and others are useful, targeted, and effective. If the leadership team serves as the professional development committee, then the primary responsibilities for planning and evaluating the professional development program rest with them. If there is a professional development committee, then the leadership team primarily serves a support role. For example, the leadership team can assist the committee with efforts to regularly assess and understand the changing needs of teachers, administrators, and students. They might help the professional development committee use results of needs assessments to determine what specific topics should be covered, what types of professional development experiences should be offered, when they should be offered, and to whom.

The school leadership team also should work with the professional development committee to align professional development with the school reform plan and ensure that all members of the school, not just teachers, are benefiting from ongoing learning experiences. For example, if one of the school's goals is to improve students' mathematics problem solving, the teams should work together to ensure that professional development activities help teachers learn more about problem-solving strategies and ways to teach them.

School leaders also are responsible for providing the right type of pressure and assistance to ensure that staff members engage in professional development and reap the intended benefits. For example, the leadership team can provide gentle pressure by making known the expectations for professional learning. They can provide assistance by ensuring that structures and resources — time and money, for example — are in place. In addition, the leadership team should foster a culture of innovation and inquiry that encourages teachers to try new practices or materials (Moffett, 2000; U.S. Department of Education, 1996). Making sure that administrative, organizational, and personal supports are in place to help educators make the adjustments necessary to sustain improvement for the long run is an important role for the leadership team.

What Does Professional Development Look Like in Our School?

The following continuum of sustainability strategies can be used to assess the adequacy of the professional development program in your building. Schools that take the actions described in the right-hand column are more likely to sustain improvement.

Least Effective	Somewhat Effective	Most Effective
Relevant		
Professional development is based on informal needs assessments and activities are "one-size-fits-all." Evaluation of the program is limited and focused on the quality of the activity rather than improved teacher practice. Changes to the professional development program are not related to the needs of the school.	Professional development is tied to the needs of the school. There are some options for professional development that take into account different levels of teacher expertise. Several sources of data are reviewed annually to determine if the program is improving teacher practice in ways that address the needs of the school. Changes to the professional development program are made if necessary.	Professional development is based on the needs and goals of the school. There are many options for professional development that take into account varied levels of teacher expertise. A variety of data are reviewed throughout the year to ensure that the program is improving teacher practice and student learning in ways that address the needs of the school. Changes to the program are made as needed.
Long Term & Integrated Into Daily Practice		
Professional development activities are disjointed and generally of insufficient duration for teachers to develop new skills. Some time is available for teachers to participate in professional development activities and encouragement is provided. Participation is not an explicit expectation. Funding is sought only on an as-needed basis.	Professional development activities are connected and some are integrated into daily practice. The activities are of sufficient duration for teachers to develop knowledge and skills. Supports in place include a professional development committee, designated time for teams of teachers to participate in school-level professional development, and an expectation to participate. Funds have been earmarked for professional development.	Professional development is long-term, ongoing, and integrated into daily practice. The activities are of sufficient duration for teachers to integrate what they have learned into their classrooms. A professional development committee is in place, and funding has been designated for professional development. Participation is a clear expectation for all teachers, and there is a culture of support for risk taking that encourages teachers to extend their learning.
Provides Feedback		
Teachers may receive informal feedback on what is learned in professional development experiences through chance conversations with colleagues, but no formal feedback on improvements in their practice is provided.	Teachers receive some feedback on their use of what is learned in professional development experiences through the teacher evaluation program or a district- or school-level coach.	Teachers receive frequent feedback on their use of what they have learned in professional development experiences through a variety of collaborative activities (e.g., peer coaching, team-level meetings, mentors, instructional support teachers, observations, self-reflection).

From the Field

Witters/Lucerne Elementary School
Thermopolis, Wyoming

Four years ago, teachers at Witters/Lucerne Elementary School targeted improved reading comprehension as the school's priority improvement area. After intensive study of several models of effective literacy instruction, the faculty unanimously agreed to work with a model of literacy instruction new to their school.

Adopting an all-new model of literacy instruction necessitated additional professional development for teachers. Using Comprehensive School Reform Demonstration grant funding, the school engaged consultants to help teachers learn the principles of effective literacy instruction. In the first year of the grant, teachers studied the principles and instructional strategies of the literacy model. Years Two and Three focused on in-class coaching, observation, and feedback. As an added benefit, on-staff literacy coordinators are available for continuing staff training and ongoing teacher observation and coaching, in order to assist teachers in practicing and applying the tenets of the program. In addition, teachers frequently observe other classrooms to glean tips about how to better implement the program's instructional strategies. Focused dialogue surrounding these visits has become a part of the everyday work of faculty members.

Since implementing the program, there has been a dramatic shift in the way teachers and other staff members view professional development. According to Principal Colleen Model, prior to implementing this program, professional development was seen as something that was done a few days a year and that had little lasting effect. Now, she says, it's an ongoing process that occurs in the classroom, after school, during teacher observations, through book studies, and in dialogue.

Although the grant funding has for the most part been depleted, the Thermopolis School District is dedicated to sustaining the changes that this literacy professional development initiative has brought to classroom instruction. The district is committed to continue funding literacy coaches and eight staff development days per year. Teachers view this support as integral to sustaining and adapting the improvements made in their literacy instruction.

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References

Alseike, B. U. (1997). *Cognitive coaching: Its influences on teachers*. Doctoral dissertation, University of Denver. Dissertation Abstracts International, 9804083.

Garet, M., Birman, B., Porter, A., Desimone, L., & Herman, R. (with Suk Yoon, K.). (1999). *Designing effective professional development: Lessons from the Eisenhower Program*. Washington, DC: U.S. Department of Education.

Lauer, P. (2001). *Preliminary findings on the characteristics of teacher learning in high-performing, high-needs schools*. Aurora, CO: Mid-continent Research for Education and Learning.

Moffett, C. A. (2000). Sustaining change: The answers are blowing in the wind. *Educational Leadership*, 57(7), 35–38.

National Staff Development Council. (2001). *National Staff Development Council's standards for staff development: Revised edition*. Retrieved from www.nsdc.org/educatorindex.htm

Sparks, D. (2002). *Designing powerful professional development for teachers and principals*. Oxford, OH: National Staff Development Council.

U.S. Department of Education. (1995). *Mission and principles of professional development*. U.S. Department of Education Professional Development Team. Retrieved from www.ed.gov/inits/TeachersWeb/mission.html

U.S. Department of Education. (1996). *The role of leadership in sustaining school reform*. Washington, DC: Author. Retrieved from www.ed.gov/pubs/Leadership

Resource Allocation

Allocating resources is perhaps one of the most challenging tasks that schools face, whether they are in the early stages of reform or years into sustaining improvements. The challenge is less daunting if the prize — student learning — is always out in front. When everyone's goal is improved student learning, resource decisions are no less difficult, but the choices often are clearer. To sustain improvement, schools must devote sufficient resources to fully implement priority goals before moving on to others. Successful schools know that improvements that are only partially implemented or implemented without the necessary support cannot be sustained. Knowing how to allocate resources effectively can lead to long-term accomplishment of goals rather than short-lived success.

Key Elements

Facing the challenge of resource allocation begins with knowing the range of resources available. But knowing at one point in time isn't enough — schools must periodically take stock of their resources. This means regularly revisiting whether financial, human, and time resources are allocated in the most appropriate ways given the school's particular goals.

Financial Resources

Schools that have authority over their budgets are better able to sustain school improvement efforts because they can direct money to support priority goals and programs (NCREL, 2000; Odden & Archibald, 2000; Klein, Medrich, & Perez-Ferreiro, 1996). If a school does not have adequate budget authority, it may need to seek funding outside the district or form partnerships to support its priority reform efforts (Klein et al., 1996).

To use financial resources wisely, schools also should understand guidelines for combining various funding streams. In particular, schools should be familiar with federal regulations that allow funds to be combined to support school improvement. For example, schools might use their Title I and Title II funds to support professional development activities that increase teachers' knowledge and use of research-based strategies for teaching reading. Combining funds is a good strategy for sustaining improvement because it allows money marked for special programs to be redirected to support the school's overall academic priorities.

Successful schools also know that they can't do it alone — they need the financial support of the community, which is more likely to be offered when there is a strong relationship between the school and community. To strengthen school-community relationships, successful schools help community members understand their goals and programs and point out how supporting the school can help businesses and community organizations accomplish their own missions. They also help businesses understand that education is a critical part of the economic vitality of the community, which means that supporting schools is an investment rather than a donation (Wall & Sellers, 2002).

Finding Financial Resources

- Work with business and community leaders to establish an "Adopt-a-School" program.
- Determine if some aspects of the school's program are eligible for funds from permanent funding streams in the community (e.g., United Way).
- Advocate for the establishment of a nonprofit foundation through which donations can be solicited and awards can be granted to individual schools.

Successful schools also find ways to connect their students directly with the community. For example, they create opportunities for students to participate in service learning projects that benefit the community and encourage community members to attend student-centered activities such as concerts, plays, and athletic events. When community members see the school as an integral part of the social and economic fabric of the community, they are more likely to offer financial support.

Human Resources

Sustaining improvement isn't just about money. It's also about people — especially the adults who directly support student learning. There are many ways that schools can reallocate human resources to better

support student learning. For example, to ensure that human resources support academic goals and priorities, schools should consider the ratio of non-instructional staff, such as attendance clerks and crisis counselors, to the number of full-time teaching staff (Walter, 2001). Although this approach might seem counterproductive, some research indicates that specialized needs can be addressed in regular classrooms with full-time instructional staff (NCREL, 2000; Odden & Archibald, 2000). This means that funds and other resources that would normally support pull-out programs can be used to reduce adult-student ratios by adding staff to the regular classroom or by hiring more full-time regular classroom teachers (Miles & Darling-Hammond, 1998; NCREL, 2000; Odden & Archibald, 2000).

Schools might also consider assigning staff in ways that limit class size in particular focus areas. For example, if literacy is a high priority for school improvement efforts, the number of students per reading group or in other literacy activities could be reduced, while maintaining larger groupings in other subjects, such as art or physical education (Miles & Darling-Hammond, 1998). Larger classes in those areas usually allow one specialist teacher to cover preparation time for several regular teachers (Odden & Archibald, 2000).

Eliminating positions or specialized programs can leave gaps in the school's ability to meet all students' needs. To fill these gaps, schools might train current staff or hire full-time teachers who can serve multiple roles or have skills in particular areas of need (e.g., dual certification in ESL and special education). Making changes in how staff members' 'time is allocated often raises issues that require special attention. For example, the school might need to obtain waivers from policies or regulations, such as minimum class sizes or the number of hours in a row that a teacher can teach.

Time and Scheduling

Time is a crucial resource in school improvement for both teachers and students. Teachers need time for collaborative learning, planning, and professional development (NCREL, 2000; Klein et al., 1996). Students need time to learn important subject matter. Restructuring teachers' and students' schedules is one way to harness time as a resource. For teachers, this could mean scheduling planning periods in conjunction with non-instructional time (e.g., during lunch or before or after school), or instituting early-release days (Miles & Darling-Hammond, 1998). Students' schedules also can be altered to provide time for teacher learning. For example, certain times of the day can be designated for students to volunteer in the community, take college courses, or attend study hall (Walter, 2001). Allocating time for collaborative planning and professional development energizes staff around shared goals for improvement and prevents situations in which teachers are donating significant amounts of their personal time to school reform efforts.

A primary role for the school leadership team is to allocate resources wisely, integrating funding streams when possible.

Research suggests that allocating longer and varied blocks of time to a given subject area can enhance student achievement by allowing for more flexibility in instructional approaches (Miles & Darling-Hammond, 1998). In order to provide more learning time and individualized attention for students, schools should consider how they allocate time to each class period. Methods for "creating" this time include alternating days of courses, having fewer courses per semester/trimester, or allotting more time to core academics than to elective classes (Miles & Darling-Hammond, 1998). Managing time in ways that support the school's goals for the long term is an important task that may require new ways of thinking about schedules and about where and how learning can take place.

What the School Leadership Team Can Do

In terms of financial resources, a primary role for the school leadership team is to allocate resources wisely, integrating funding streams when possible. The team should also build the capacity of staff to pursue funding sources, analyze relevant financial data, and manage money (Trimble, 2002). The success of these tasks involves developing relationships with organizations and individuals in the community who may have resources to support school improvement and assessing whether the services or resources that partnerships

provide are being used appropriately given the school's vision. The school leadership team should approach the development of partnerships and the search for new sources of funding as a continuous, long-term process to ensure that sufficient resources are available to sustain improvement efforts.

In terms of human resources, as a school progresses toward long-term sustainability of improvement efforts, the need to change staff allocations may become apparent. Nonetheless, changes in staffing patterns may be difficult to accept; wise school leaders will include all stakeholders in the process of deciding how best to allocate human resources.

Keeping track of the use of time is another key activity for the school leadership team. The team can lead the effort to continually assess whether the structure of the school week, including staffing assignments and class periods, supports the school's vision for school improvement (Walter, 2001). In addition, school leaders can evaluate how efficiently time is being used to determine if sufficient time is allotted to priority areas and whether too much time is devoted to projects or activities that are not directly connected to learning goals (Walter, 2001).

What Does Resource Allocation Look Like in Our School?

The following continuum of sustainability strategies can be used to assess the adequacy of the resource allocation process in your building. Schools that take the actions described in the right-hand column are more likely to sustain improvement.

Least Effective	Somewhat Effective	Most Effective
Financial Resources		
The school makes some decisions about how to allocate funds in support of school improvement goals. Staff members seek new sources of funding or other support only as necessary.	The school has control over a portion of its budget. Some funds from different sources are combined and directed in support of the school's goals. Staff members regularly seek new sources of funding and other support in order to supplement existing resources.	The school has control over the majority of its budget. To the extent possible, all funds from different sources are combined and directed in support of the school's goals. Staff members actively and systematically seek new funding sources and partnerships with businesses and community organizations. Resources, including current partnerships, are regularly reviewed and evaluated to ensure that they are used in an efficient manner.
Human Resources		
Staff positions are a mix of academic, non-instructional, and specialized positions, which may not efficiently support school improvement goals and priorities.	The majority of staff positions are focused on full-time instruction and areas that fall under the school's academic goals and priorities.	All staff positions are focused on full-time instruction and areas that fall under the school's academic goals and priorities. Adult-student ratios may change depending on the specific academic area and related goals. Retention strategies are designed to minimize staff turnover.
Time and Scheduling		
Common planning or professional development events are not part of school scheduling. They rarely take place during the school day.	School schedules are arranged to provide some job-embedded, common planning time and time for professional development.	School schedules are arranged to provide appropriate time for job-embedded common planning and professional development. Class length varies to provide students with more time for meaningful instruction in core academics.

From the Field

Huntington Elementary School
Lincoln, Nebraska

When members of the Leadership Team at Huntington Elementary School make decisions about allocating resources within their school, they appreciate the support they have from their district office. Schools in Lincoln are allotted points based on a formula that takes into account the number of students, various demographic and risk factors, and program needs. These points then translate into dollars that can be spent on staff and programs according to the needs of each particular school.

Nonetheless, deciding how to allocate resources to best serve students can be a complicated task. Huntington's School Leadership team has approached that task thoughtfully. The team spent the entire 1998–1999 school year studying data and proposing hypotheses about their students' achievement levels. From those data, they concluded that students entering Huntington needed additional readiness skills as well as language enrichment activities in order to be successful in literacy. The team concluded that targeting school resources toward the problem was a critical part of their plan to boost student achievement in this area.

The leadership team designed a resource allocation plan that leveraged funding in different ways. The plan, which incorporated funding reallocated from Title I as well as money from the school's general fund, led to the continuation of an effective full-day kindergarten program, and the hiring of a CSR facilitator, a special education coordinator, and a full-time literacy support person. Because the school also viewed time as a valuable resource, the leadership team initiated curriculum mapping projects to ensure that content and skills were properly differentiated by grade level.

Although grant funding is ending for CO-NECT, the school's CSR program, the leadership team is taking steps to assure the sustainability of their programs. As part of their work with CO-NECT, the leadership team learned how to audit their instruction and programs for effectiveness. These audits will continue, using Huntington's own resources. According to Principal Pam Sedlacek, "Sustainability won't be an issue. This is the way we do business now, and we'll allocate the resources it takes to continue our improvement efforts."

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References

Klein, S., Medrich, E., & Perez-Ferreiro, V. (1996). *Fitting the pieces: Education reform that works*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Retrieved from www.ed.gov/pubs/SER/FTP/

Miles, K., & Darling-Hammond, L. (1998). Rethinking the allocation of teaching resources: Some lessons from high-performing schools. *Educational Evaluation and Policy Analysis, 20*(1), 9–29.

North Central Regional Educational Laboratory (NCREL). (2000). *A better return on investment: Reallocating resources to improve student achievement*. Oak Brook, IL: Author. Retrieved from www.ncrel.org/policy/pubs/pdfs/booklet.pdf

Odden, A., & Archibald, S. (2000, Spring). Reallocating resources to support higher student achievement: An empirical look at five sites. *Journal of Education Finance, 25*, 545–564.

Trimble, S. (2002, March). Common elements of high performing, high poverty middle schools. *Middle School Journal, 33*(4). Retrieved from www.nmsa.org/services/msj/msj_march2002.htm#a

Wall, P., & Sellers, S. (2002, February). Presentation at 21st Century Community Learning Centers workshop, Austin, TX.

Walter, F. (2001). *District leaders' guide to reallocating resources*. Portland, OR: Northwest Regional Educational Laboratory. Retrieved from www.nwrel.org/csrdp/reallocating.html

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